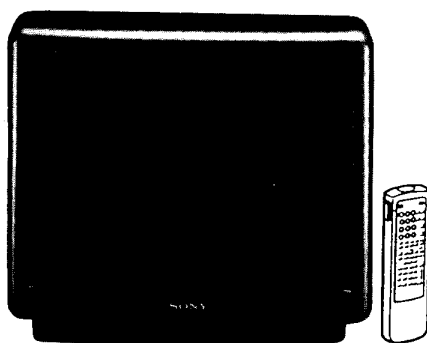


KV-X2152U

RM-816

SERVICE MANUAL

UK Model
Chassis No. SCC-E23R-A



AE-1C CHASSIS

MODELS OF THE SAME SERIES	
KV-X2152U	KV-A2112U/A2512U
KV-C2122U	KV-A2912U
KV-E2522U/E2922U	KV-X21/X25/X2942U

SPECIFICATIONS

【KV-X2152U】

Television system I
 Colour system PAL, SECAM, NTSC3.58, NTSC4.43
 Stereo system NICAM stereo
 Channel coverage UHF: B21-B69
 Picture tube Hi-Black Trinitron tube
 Approx. 54.5 cm (21 inches)
 (Approx. 51 cm picture measured diagonally)
 100°-degree deflection

Inputs / Outputs Terminals

REAR

⊖ 21 pin Euro connector (CENELEC standard) -Inputs for audio and video signals
 -Inputs for RGB
 -Outputs of TV video and audio signals
 G·2/-⊖21-pin Euro connector -Inputs for audio and video signals
 -Inputs for S-video
 -Outputs for video and audio signals (selectable)
 ⊕ Audio output(variable) -phono jacks

FRONT

⊖ Video input phono jack
 ⊕ Audio inputs (L,R) phono jacks



S-video Inputs-4pin DIN

Headphone jack : stereo mini jack

Sound output 30 W + 30 W
 Power consumption 122 W
 Dimensions Approx. 512×449×456 mm (w/h/d)
 Weight Approx.24kg

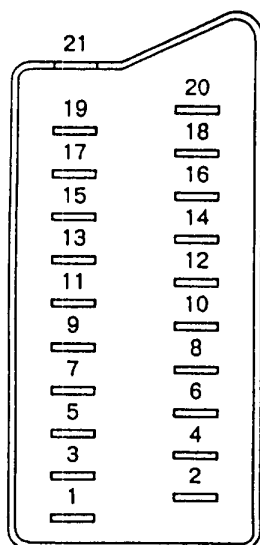
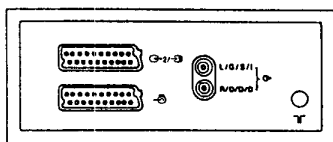
【RM-816】

Remote control system infrared control
 Power requirements 3V dc
 2 batteries IEC designation R6 (size AA)
 Dimensions Approx. 75×221×23mm(w/h/d)
 Weight Approx. 230g (including batters)
 Accessories supplied IEC designation R6 batteries (2)
 Supplied accessories RM-816 Remote Commander (1)
 IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.

TRINITRON® COLOUR TV
SONY®

21 pin connector (→, →+2/→)



Pin No.	1	2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level: 0.5Vrms Output Impedance: Less than 1kohm*
2	○	○	Audio input B (right)	Standard level: 0.5Vrms Input Impedance: More than 10kohms*
3	○	○	Audio output A (left)	Standard level: 0.5Vrms Output Impedance: Less than 1kohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio input A (left)	Standard level: 0.5Vrms Input Impedance: More than 10kohms*
7	○	●	Blue Input	0.7V ± 3dB, 75ohms, positive
8	○	○	Function select (AV control)	High state (9.5 – 12V): Part mode Low state (0 – 2V): TV mode Input Impedance: More than 10kohms Input capacitance: Less than 2 nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green	Green signal: 0.7V ± 3dB, 75ohms, positive
12	○	○	Open	
13	○	○	Ground (red)	
14	○	○	Ground (blanking)	
15	○	–	Red Input	0.7V ± 3dB, 75ohms, positive
	–	○	(S signal) chroma Input	0.3V ± 3dB, 75ohms, positive
16	○	●	Blanking Input (Ys signal)	High state (1 – 3V) Low state (0 – 0.4V) Input Impedance: 75ohms
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1V ± 3dB, 75ohms, positive Sync: 0.3V (– 3, +10dB)
20	○	–	Video Input	1V ± 3dB, 75ohms, positive Sync: 0.3V (– 3, +10dB)
	–	○	Video Input/Y (S signal)	1V ± 3dB, 75ohms, positive Sync: 0.3V (– 3, +10dB)
21	○	○	Common ground (plug, shield)	

○ connected ● unconnected (open)

* at 20Hz – 20kHz

4 Pin Connector (→)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V _{+10dB}
4	C (S signal) input	0.3V ± 3dB 75ohm, positive

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(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

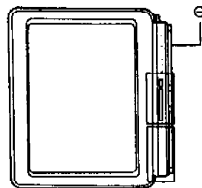
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

1-1. SWITCHING ON/OFF

After you have completed the basic preparation your TV is ready to be connected to the mains power supply (240V AC, 50Hz).

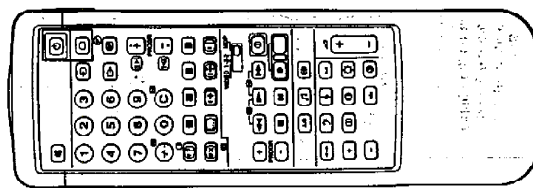


How to turn the TV on

Action	Result
Press 0 on the TV. 	The TV will turn on. Note: If the screen remains blank, the TV may be in the standby mode. Press 0 or any number button on the commander to switch it on.

How to turn the TV off

A Temporarily	
Press 0 to enter standby mode.	The TV will be in standby. To return to the TV mode press 0
B Completely	
Press 0 on the TV.	The TV will turn off.



1-2. PRESETTING

After you have installed the TV you need to preset TV channels. TV stations broadcast their channels at certain frequencies. You must preset these channels to programme numbers on the TV before you can watch the TV programmes.

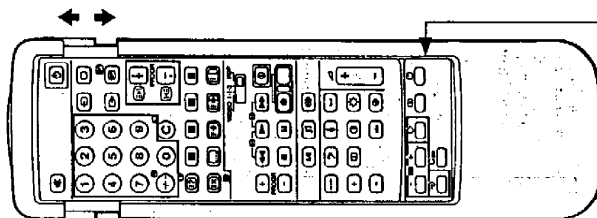
There are 60 spaces for storing these channels.

Slide open the 'full' function side of the remote commander to reveal preset buttons.

How to preset channels automatically

If you are unfamiliar with the channel numbers of the stations you wish to preset, use "How to preset channels automatically". If you are familiar with the channel numbers refer to "How to preset T.V. channels directly".

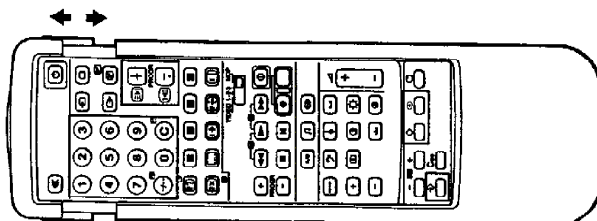
Action	Result
1 Press → to enter the preset mode. 	The programme number will start flashing.
2 Press PROGR + or - or the number buttons to select the programme number to which you want to preset a channel. Note To select a double-digit number, use the -/+ button. For example, if you want to choose 23, press -/+, 2, and then 3.	The programme number changes
3 Press EEB + or - once to search forward or backward for channels. Note When a channel is tuned in, the search will stop. If you want to skip a channel, press EEB + or EEB -.	
4 Press ◇ if you want to store the channel which is tuned in. Press → to exit preset mode without storing. 	The channel is now stored and you have returned to TV mode.
5 Repeat steps 1 to 4 to store the other channels.	



Note: These buttons should be used in preset mode only.

How to preset channels directly

Action	Result
1 Press \rightarrow to enter the preset mode.	The programme number will start flashing.
2 Press PROG +/- or the number buttons to select the programme number on which you want to preset a channel. Note To select a double-digit number, use the +/- button. For example, if you want to choose 23, press +/-, 2, and then 3.	The programme number changes.
3 Press C.	The indication "C-" starts flashing on the display.
4 Select the channel number with two digits (e.g. 04) by pressing the number buttons. Note Press the second number within 5 seconds after the first one, otherwise the operation will be cancelled.	The channel number changes. Note If you have made a mistake the letter "X" will appear. Repeat step 4 again.
5 Press \rightarrow to store the channel which is tuned in. Press \rightarrow to exit the preset mode without storing.	The channel is now stored and you have returned to TV mode.
Repeat steps 1 to 5 to store the other channels.	



How to Name a Station

You can use up to five characters to "name" a channel or station (i.e. BBC1).

Action	Result
1 Select a programme number you want to name by pressing the PROG +/- or the number buttons	The selected programme number will appear.
2 Press \rightarrow .	The programme number starts flashing.
3 Press C.	The first column of the station name indication will start flashing.
4 Press + or - to select a letter in the alphabet, a number, or a blank space.	The letters of the alphabet, numbers and the space (" ") will appear sequentially.
5 Press C.	The first character is now set and the second column will start flashing.
6 Repeat steps 4 and 5 to set each letter.	
7 Press \rightarrow .	The channel name is now stored and you have returned to TV mode.

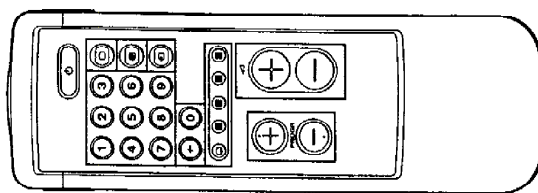
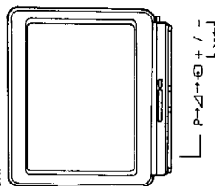
How to tune in a channel temporarily

You can tune in a channel temporarily, if it has not been preset.

Action	Result
1 Press C.	The indication "C" appears on the screen.
2 Select the channel number with two digits by pressing the number buttons (e.g. for channel 4, first press 0, then 4.)	The channel is received, but it is not stored to any programme number.

1-3. BASIC TV OPERATION

Note: Press **L** on door to open.



How to Skip Programmes

Using the PROG +/– buttons you can skip unused programme channel numbers. However, the skipped numbers may still be called up using the number buttons.

Action	Result
1 Press → to enter the preset mode.	The programme number will start flashing.
2 Select the programme number that you want to skip by pressing PROG +/– or the number buttons.	The programme number changes.
3 Press Ch .	The lowest channel number appears under the programme number.
4 Press ◊ .	The channel is now stored and you have returned to TV mode.

Repeat steps 1 to 4 to skip other programme numbers.

How to Fine Tune Manually

If the picture is distorted, you can fine tune the channel manually.

Action	Result
Press ↔ + or – repeatedly until the picture looks normal.	The indication ← F → appears on the screen.
Press → to enter the preset mode.	The programme number starts flashing.
Press ◊ .	The fine tuning is stored.

Note: Normal tuning can be restored if you preset the channel once more.

This section introduces you to the basic control functions which are available on the simple side of the remote commander.

How to Select Programmes

Before you can select programmes make sure that you have preset channels.

Action	Result
Press PROG +/– or the number buttons. To select a double-digit number, use the +/– button. For example, if you want to choose 23, press +/–, 2, and then 3.	The selected programme is displayed.

How to Adjust the Volume

Action	Result
Press Δ + or –	The volume markers will appear, and are adjusted accordingly.

How to Use additional features

Basic teletext operation

Select

The **⓪** button to view the teletext.

The **⓪** button to request subtitles (P. 888).

One of the coloured buttons for text operation.

The **⓪** button to return to TV mode.

For details about teletext operation.

How to operate with the buttons on the TV

You can also select programmes and adjust the volume using the **P**, **Δ**, **◊** and **↔** buttons on the front of the TV.

For operation, first press the **P**, **Δ**, **◊** button repeatedly so that the **P** (for programme) or **Δ** (for volume) indication appears on the screen, and then adjust with the **↔** +/– buttons.

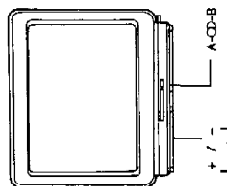
Note: To restore to factory set level press **→** **←** +/– together.

How to view the video input picture

Press **⓪** To return to the TV mode, press **⓪**. For further details.

1-4. ADVANCED TV OPERATION

This section shows you how to use convenient features and how to adjust the picture and sound to your taste. Use the full-function side of the Remote Commander.



How to use on-screen display and special sound features

You can enjoy the following convenient features.

How to	Action	To resume normal picture/sound
Display on-screen indications	Press CA	Indications disappear after some seconds
Display programme numbers	Press CB twice	Press CB twice again.
Mute the sound	Press CC	Press CC again.
Select a language in bilingual programmes.	Press A/B. The selected mode of the A-C-B indicator on the TV lights up.	Press A/B.
Set the sound for music listening.	Press CD	Press CD again.
Use the space sound (special acoustic effect)	Press CE	Press CE again.
Request the time	Press CF	Press CF again.

How to adjust the picture and sound

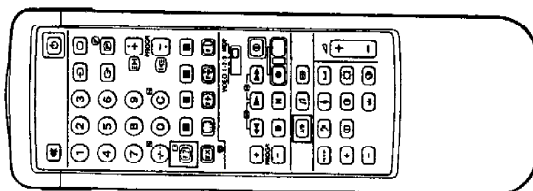
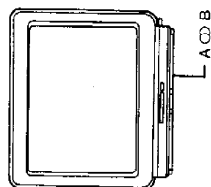
Although the picture and sound have been adjusted at the factory, you might want to adjust them to your own taste. To do this, please follow the steps below.

To Adjust:	Press:	Then:	Result: (+ ↔ -)
Picture:			
Colour Intensity	CA	+	More ↔ Less
Picture Contrast	CB	-	More ↔ Less
Brightness	CC		Bright ↔ Dark
Sound:			
Bass	CD	+	More ↔ Less
Treble	CE	-	More ↔ Less
Balance	CF		More Right ↔ More Left

To reset the picture and sound to factory set levels press **→←**.

On the set:

Press **→←** + **→←** buttons simultaneously.



How to select a NICAM broadcast

This Sony TV has been designed to select Nicam broadcasts when available. Whenever a Nicam broadcast is received, the **bd** symbol appears briefly on the screen. When the Nicam programme ends, or you switch channels to one without Nicam, the **bd** symbol appears. To check if the channel you are watching is receiving Nicam, press the on screen display button **CA** on the full function side of the remote commander.

How to select the sound of your choice

Nicam programmes can be broadcast in two ways. You may select the sound you want to hear in either of these, by pressing the **CD** button on the full function side of the remote commander.

Service being broadcast	Action	The sound you hear	Indication on the TV A-C-B
Nicam		Stereo/ Mono (2 channel)	
	Press A/B	Normally broadcast sound	
Bilingual	Press A/B again to return to stereo/ Mono (2-channel)		
		Language A	
	Press A/B	Language B	
	Press A/B	Normally broadcast language	
	Press A/B again to return to language A		




* Depending on availability of service.

1-5. TELETEXT OPERATION

TV stations broadcast teletext programmes via the TV channels. To receive teletext programmes, use the buttons indicated in green on the full side of the Remote Commander.

With the simple side of the Remote Commander, only the basic operation is possible.







How to View the Teletext













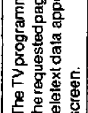







Action	Result
1 Select the channel which carries the teletext service you wish to see.	The channel changes on the screen.
2 Press  .	If the teletext signal is not broadcast, then 1000 is displayed.
3 Input three digits for the page number using the number buttons. Note If you make a mistake, type in any three digits, then re-enter the correct page number.	The numbers are entered on the screen. The requested page will appear in a few seconds.
To return to the TV mode. Press  .	
To change the teletext channels First press  to return to the TV mode, then repeat steps 1 to 3.	

Note

If the signal of the TV channel is weak, teletext errors may often occur.

How to Use the Advanced Features of Teletext

How to	Action	Result (On-screen display)
Request the index page.	Press  .	The index page appears. 
Request the subtitle page (p888).	Press  .	The subtitle page is displayed (p888).
Access the next or preceding page.	Press  (PAGE +) or  (PAGE -).	The next or preceding page appears. 

How to	Action	Result
Superimpose the teletext display on the TV programme.	Press  once if you are in text mode, or press  twice if in TV mode. To return to the normal teletext display, press  again.	The teletext displays are superimposed on the TV programmes. 
Prevent a teletext page from being updated or changed.	Press  .	The HOLD symbol () appears on the screen and the chosen sub-page is held until you cancel. 
Enlarge the teletext display.	Press  once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.	The upper half is enlarged. 
Reveal concealed information (e.g. answers to a quiz).	Press  .	The information is revealed. 
Watch the TV programme while waiting for a requested page to be displayed.	1. Request a new page. 2. Press  .	The numbers are entered. The TV programme is displayed, and the requested page number and other teletext data appear at the top of the screen. 
	3. When the requested page has been captured, the page number remains and the other data disappears.	
	4. Press  to view this page.	The requested page is displayed.
Have a requested page displayed at a pre-determined time.	1. Request a desired page. 2. Press  .	The requested page is displayed. "*****" appears at the bottom of the screen. The time is entered on the screen.
	3. Enter the time you want to have the page displayed with four digits using the number buttons. (For example, enter 0730 for 7:30 AM.)	
	4. Press  to watch the TV programme until the requested time.	At the requested time, the page number will be displayed at the top of the screen, to view this page, press  .
	To cancel the request Display the teletext page, then press  .	The request is cancelled. To resume TV mode, press  .

Some of the features may not be available depending on the Teletext service.

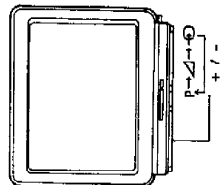
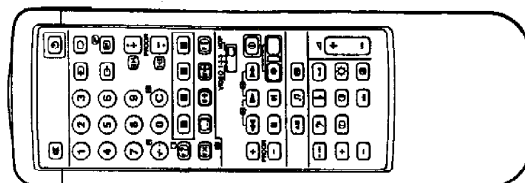
1-6. OPTIONAL CONNECTIONS / OPERATIONS

How to use the FASTEXT Feature

FASTEXT feature allows you to access pages quickly with one key operation. When a FASTEXT page is broadcast, a colour coded menu appears at the bottom of the screen. Each coloured prompt corresponds to the coloured buttons on either side of your Remote Commander.

Operation	
Action	Result
Press one of the coloured buttons which correspond to the coloured prompt on the teletext.	The selected teletext page appears.

Note
Correct FASTEXT operation depends on the necessary signals sent from the TV station.



How to view the video input picture

You can view the picture of video equipment connected to the input terminals by selecting the input mode.

Operation	
Action	Result
Press 1 repeatedly to select the desired input.	Symbol for the selected input appears. (See the table below.)
To return to the TV mode, press the TV button.	

Input modes

Input modes	
Symbol	Result
1	Audio/video input through the 1 connector.
2	RGB input through the 2 connector.
3	Audio/video input through the 3 connector.
4	S video input (from a VTR equipped with an S video output) through the 4 connector.
5	Audio/video input through 5 and 6 jacks on the front.
6	S video input through the 6 connector on the front (4-pin connector).
You can also select the input mode using the P-1-2-3-4 button on the TV. In this case, first select 1 and then press + / - buttons to select the input.	

How to select the Output

The **1**/**2**/**3** connector outputs four kinds of audio/video signals. You have to select one of them as follows.

Operation	
Action	Result
Press 1 repeatedly to select the desired input.	Symbol for the selected output appears. (See the table below.)

Output modes

Output modes	
Symbol	Output from
1	The audio/video signal from the 1 connector.
2	The audio/video signal from the 2 / 3 connector.
3	The audio/video signal from the 4 connector.
TV	The audio/video signal from the TV aerial terminal.

1-7. ADDITIONAL REMOTE COMMANDER OPERATION

How to Control Other Sony Video Equipment

By switching the VIDEO 1/2/3, MDP selector, you can operate most Sony video equipment (Beta VTR, 8mm VTR, VHS VTR, and video disc player).

- 1** Set VIDEO 1/2/3, MDP selector according to the desired video equipment.
VIDEO 1: Beta or ED Beta VTR
VIDEO 2: 8mm VTR
VIDEO 3: VHS VTR
MDP: Video disc player

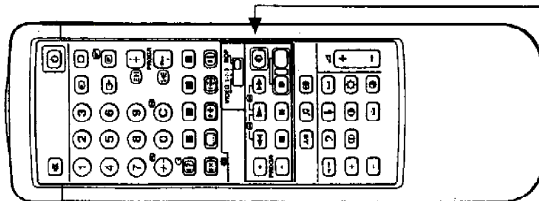


- 2** Use the buttons in the indicated area to operate video equipment.

Note
When you use **•** button, be sure to press this button and the one on the right simultaneously.

Notes

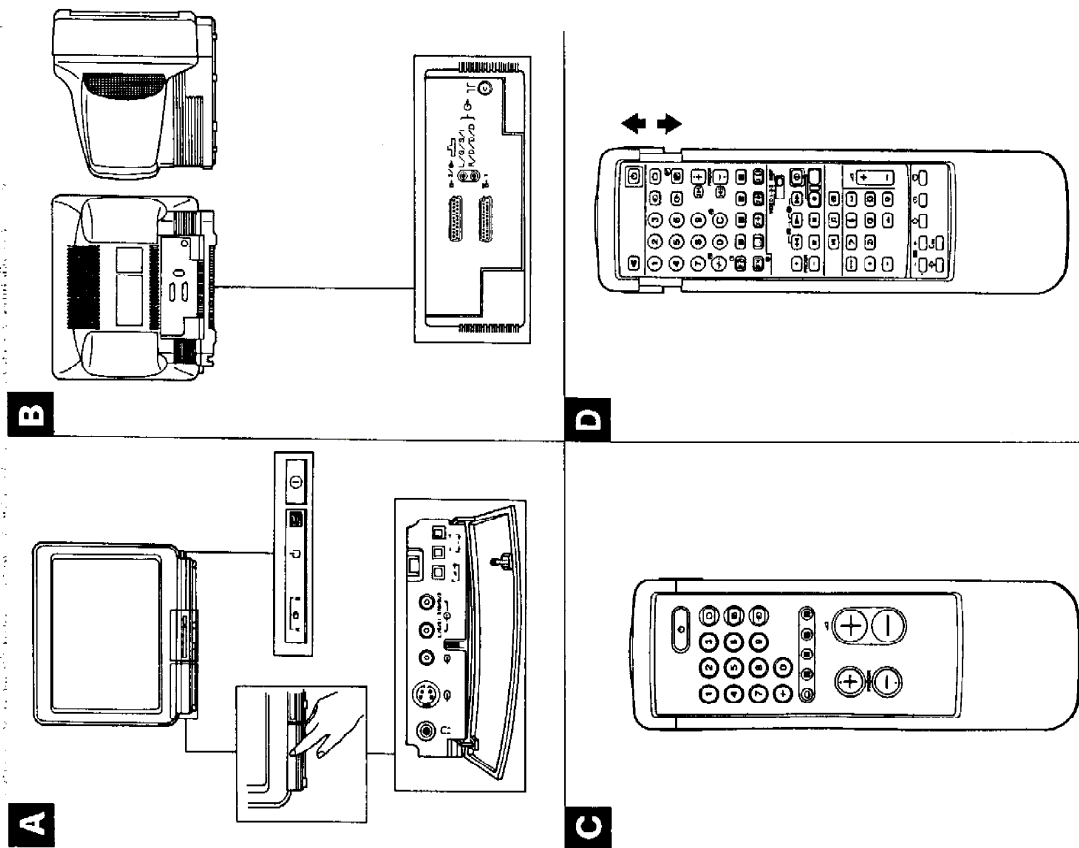
- If your video equipment is furnished with COMMAND MODE selector, set the selector to the same position as the VIDEO 1/2/3, MDP selector on the supplied Remote Commander.
- If the equipment does not have a certain function, the corresponding button on the Remote Commander will not work.



Buttons to operate other Sony Video equipment

1-8. ADDITIONAL INFORMATION

Parts Identification



This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information.

A TV set – Front	
Sign	Name
ⓘ	Main power switch
⓪	Standby indicator
A-⓪-B	NICAM indicators
⓪	Headphones jack (stereo minijack)
⓪-⓪	Input jacks (S-video /video/audio)
P-⓪-⓪	Function selector (P-programme/volume input)
- +	Adjustment buttons for function selector

B TV set – Rear	
Sign	Name
⓪-2/⓪	21-pin Euro-AV connector (S-video/video input, TV/video output)
⓪-⓪	21-pin Euro-AV connector (RGB/video input, TV output)
⓪	Audio output jacks (phono jacks)
⓪	Aerial terminal (IEC type)

C Remote Commander – simple side	
Sign	Name
⓪	Input mode selector
⓪	Teletext button
⓪	Fastest buttons
⓪	TV mode selector
⓪	Standby button
1,2,3,4,5, 6,7,8,9, and 0	Number buttons
-/-	Double-digit entering button
⓪	Volume control buttons
PROGR +/-	Programme selector

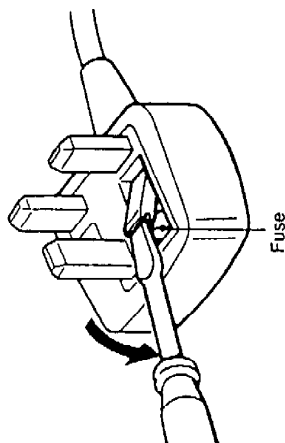
D Remote Commander – full function side	
Sign	Name
⓪	Mute on/off button
⓪	Standby button
1,2,3,4,5, 6,7,8,9, and 0	Number buttons
⓪	Input mode selector
⓪	TV power on/TV mode selector button
⓪	Output mode selector
⓪	Teletext button
⓪	Music button
A/B	Selector for NICAM
-/-	Double-digit entering button
⓪	Direct channel entering button
⓪	Space sound button
⓪	Request time display buttons
⓪	Teletext operation buttons
⓪	Fastest buttons
⓪	On-screen display button
⓪	Picture and sound adjustment reset button
⓪	Volume control
PROGR +/-	Programme selector
⓪	Picture and sound controls
⓪	Video equipment selector
⓪	Video equipment operation buttons
⓪	Programme number clear button
⓪	Channel preset button
⓪	Tuning buttons
⓪	Channel store button
⓪	Station label button

• CAUTION

The flexible mains lead is supplied connected to a B.S. 1363 fused plug having a fuse of 5 amp capacity. Should the fuse need to be replaced, use a 5 AMP FUSE approved by ASTA to BS 1362, i.e., carries the ⓪ mark.

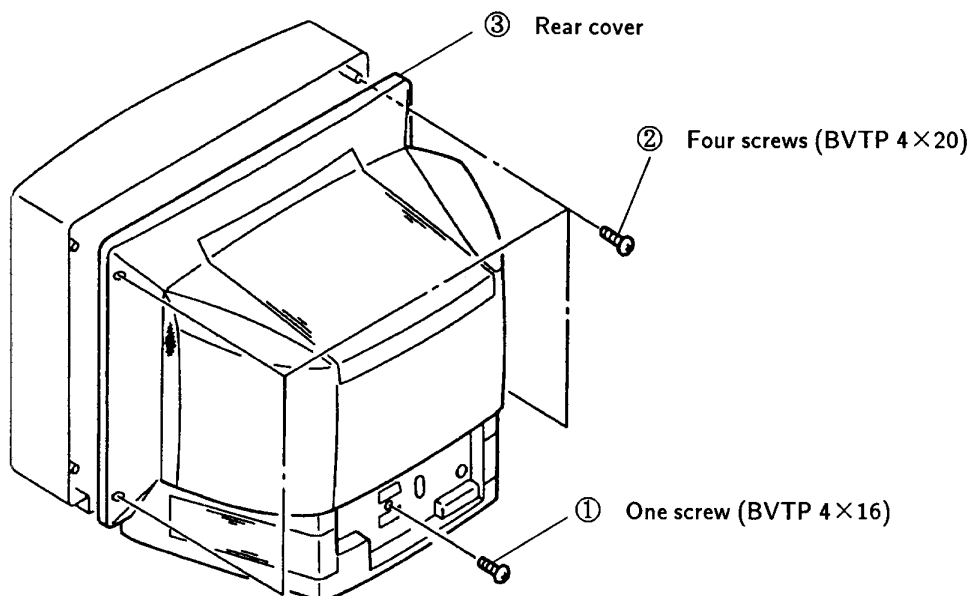
How to replace the fuse

Open the fuse compartment with the blade screwdriver, and replace the fuse.

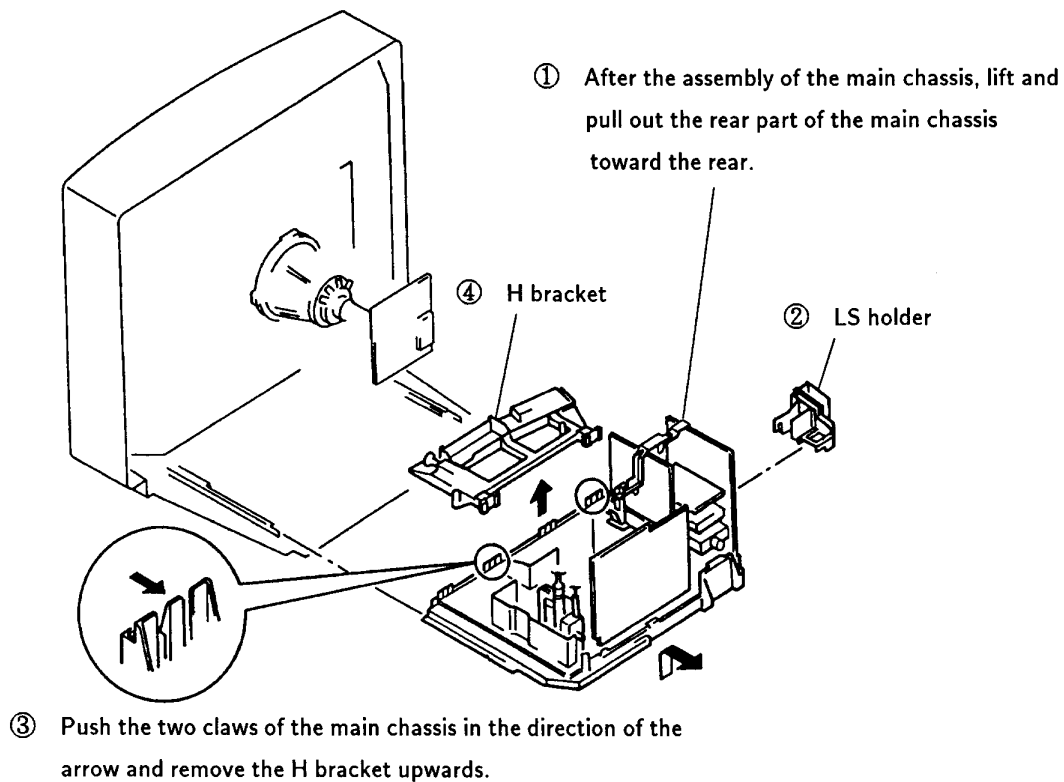


SECTION 2 DISASSEMBLY

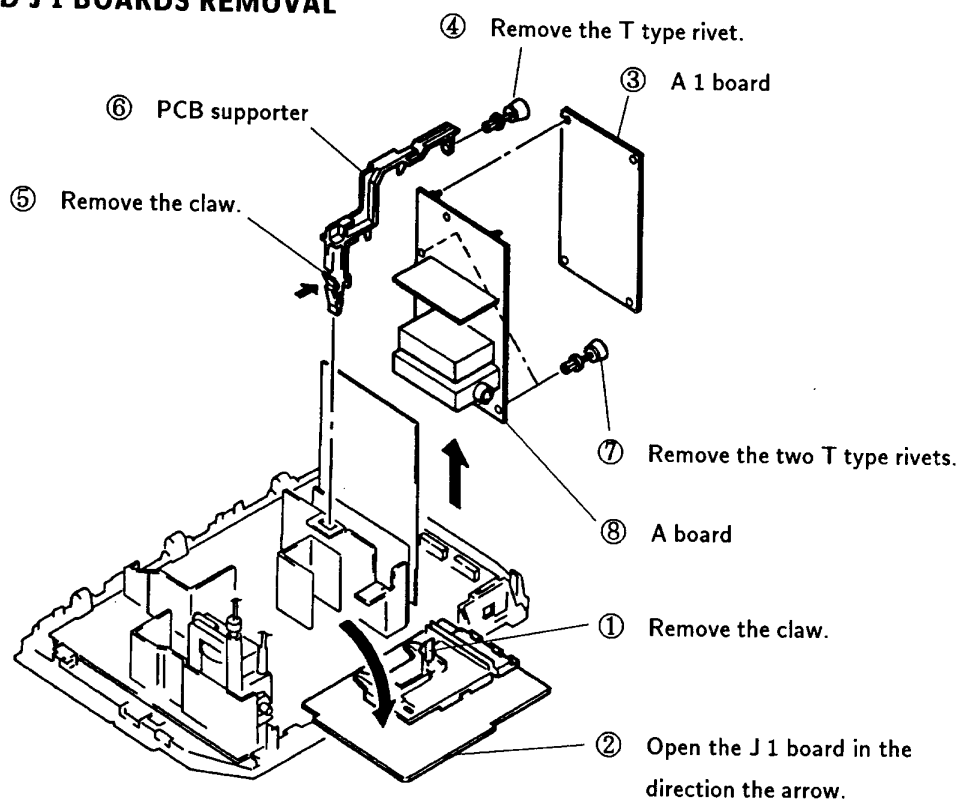
2-1. REAR COVER REMOVAL



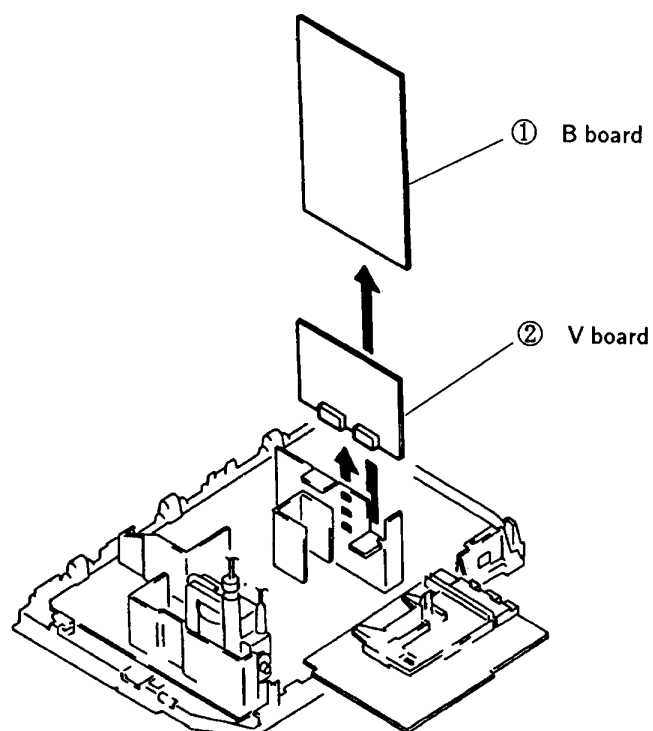
2-2. CHASSIS ASSEMBLY REMOVAL



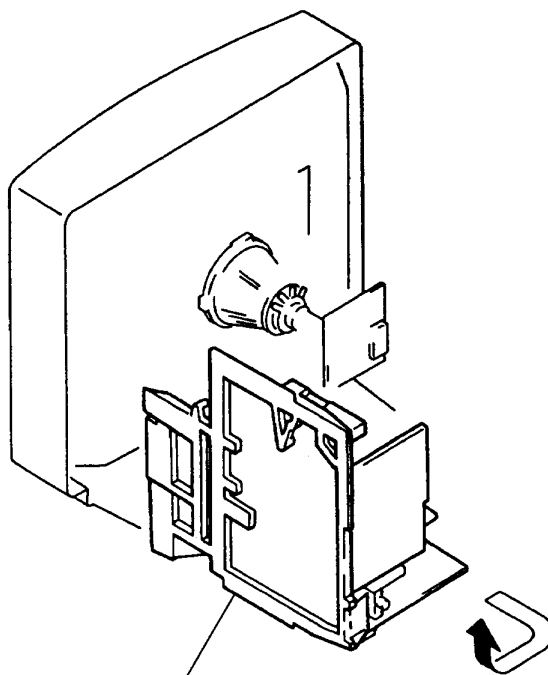
2-3. A, A 1 AND J 1 BOARDS REMOVAL



2-4. B AND V BOARDS REMOVAL

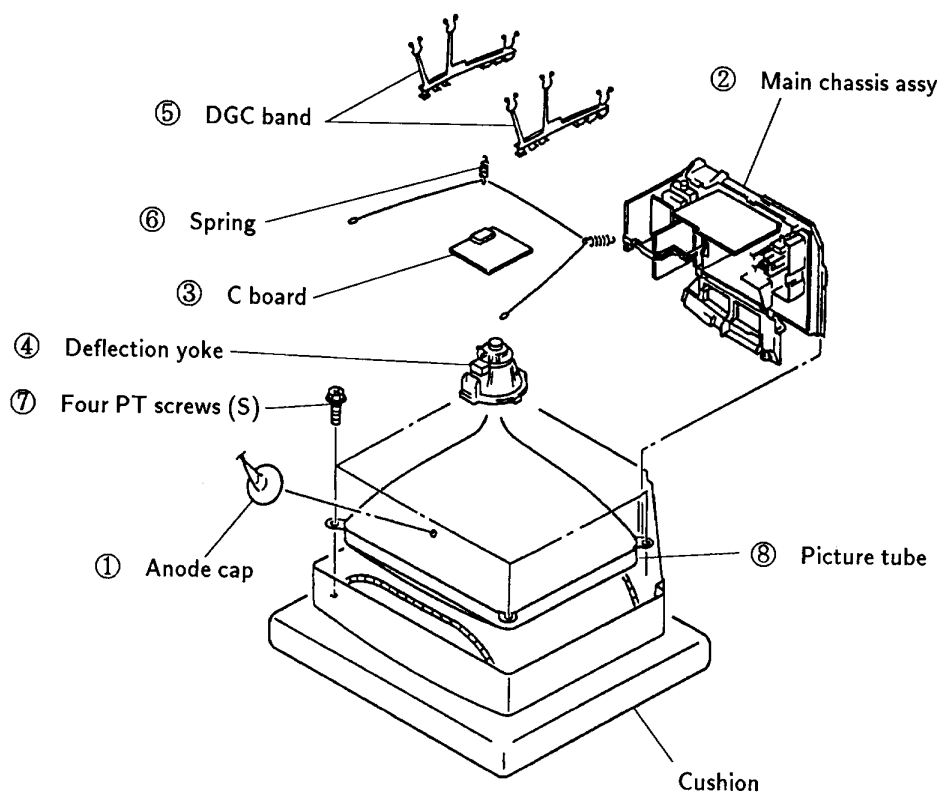


2-5. SERVICE POSITION



- ① Remove main chassis assembly
in the direction of the arrow.

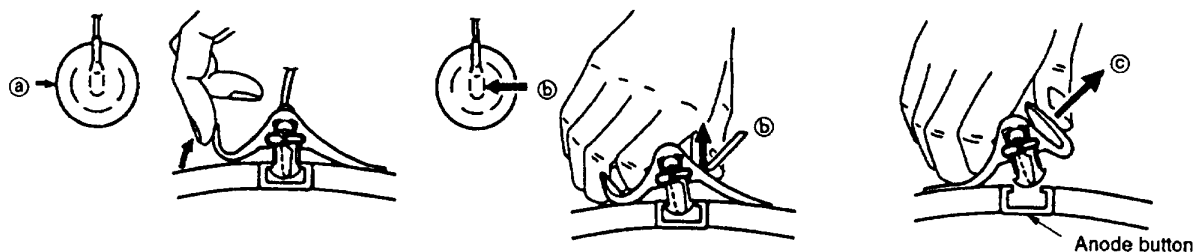
2-6. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

• REMOVING PROCEDURES



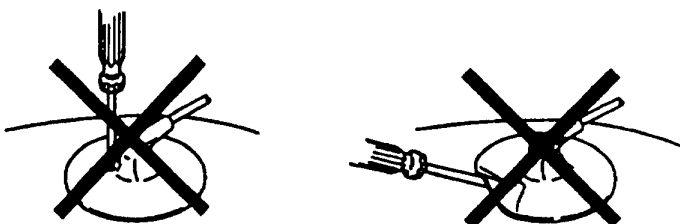
① Turn up one side of the rubber cap in the direction indicated by the arrow ①.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch below should be set as follows unless otherwise noted :

● CONTRAST control..... 80%(or Normal by commander)

☆ BRIGHTNESS control..... 50%

Perform the adjustments in order as follows:

Preparation:

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser..

3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.

CONTRAST	} normal
BRIGHTNESS	
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly.
 (Fig.3-1 - 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
5. Switch over the raster signal to blue and blue and confirm the condition.
6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)

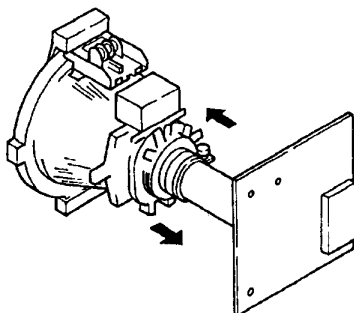


Fig.3-1

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G 2) and White Balance

Note: Test Equipment Required.

1. Color bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

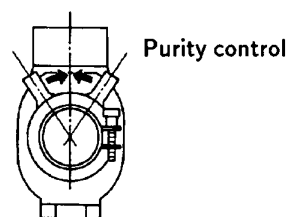


Fig.3-2

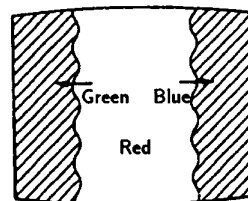


Fig.3-3

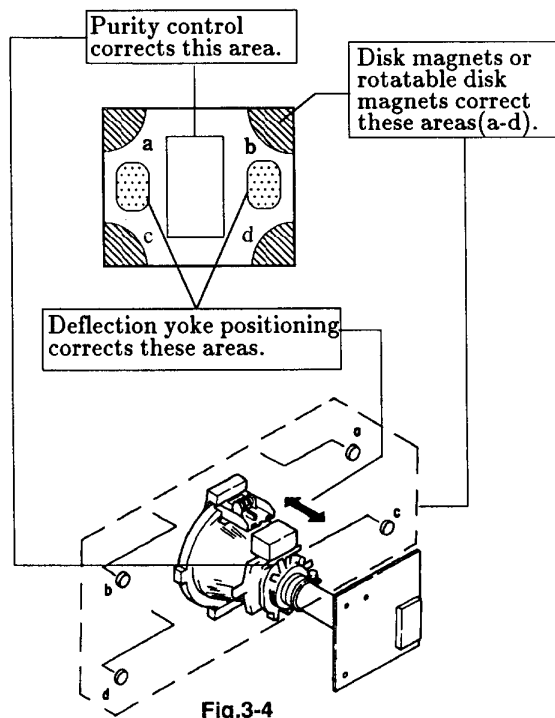


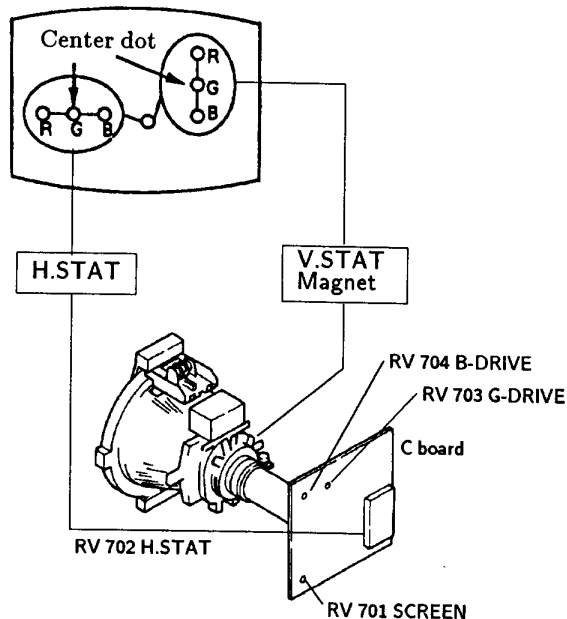
Fig.3-4

3-2. CONVERGENCE

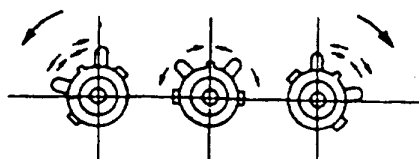
Preparation:

- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

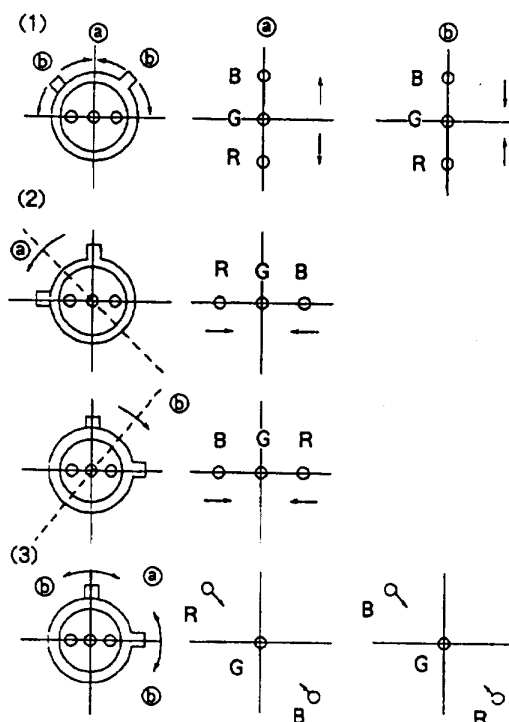
(1) Horizontal and Vertical Static Convergence



1. Adjust H.STAT VR to converge red, green and blue dots in the center of the screen. (Horizontal movement)
 2. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
 3. If the red, green and blue dots do not converge on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)
- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4. When the V.STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.

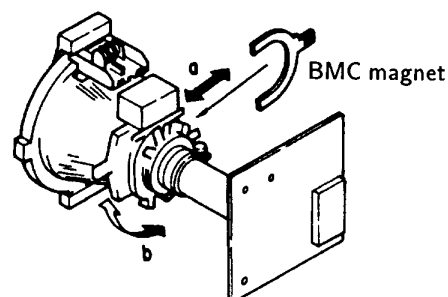


If the red and blue dot do not converge with green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

Rotate BMC magnet (b) to correct insufficient V.static convergence.

In either case, repeat Beam Landing Adjustment.



(2) Dynamic Convergence Adjustment

Preparation:

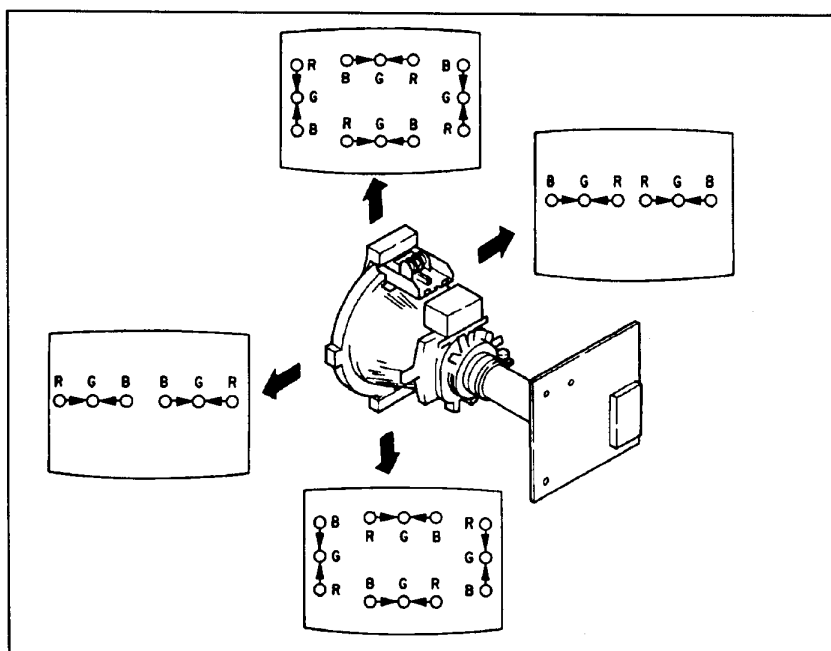
● Before starting perform Horizontal and Vertical static convergence Adjustment.

1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.

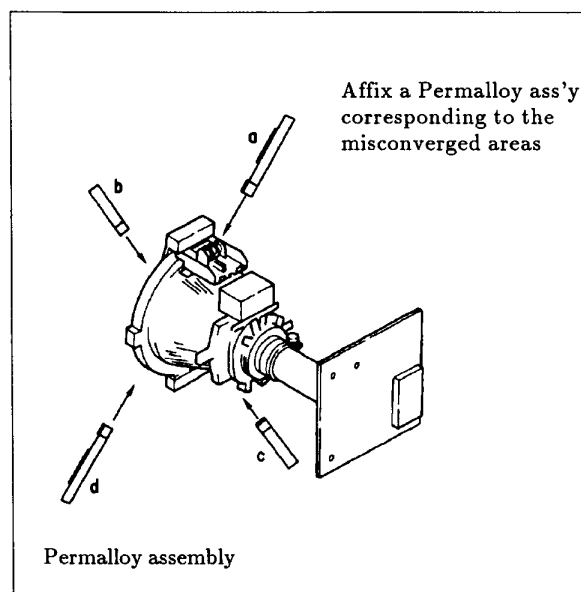
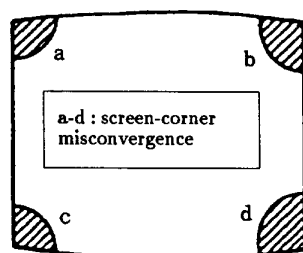
3. Move the deflection yoke for best convergence as shown below.

4. Tighten the deflection yoke screw.

5. Install the deflection yoke spacers.

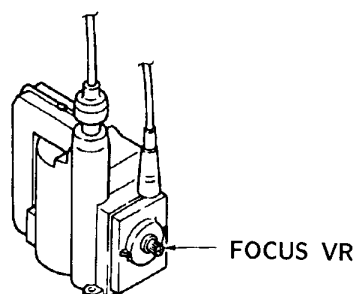


(3) Screen-corner Convergence



3-3. FOCUS

Adjust FOCUS so that the whole screen is in best focus.

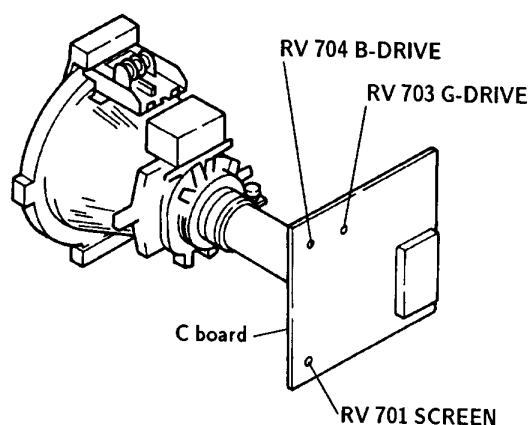


White Balance Adjustment

1. Input all-white signal from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the following using RV 704 (B DRIVE) and RV 703 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

3-4. SCREEN (G 2) and WHITE BALANCE

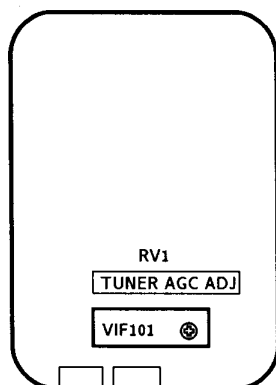


Screen (G 2) Setting

1. Input dot signal from the pattern generator.
2. Set the picture BRIGHTNESS control to minimum level.
3. Apply 170 V DC to the cathodes of R,G and B from an external power power source.
4. While watching the picture, adjust the G 2 volume (RV701) immediately before fly-back line disappears.

SECTION 4 CIRCUIT ADJUSTMENTS

4-1. A BOARD ADJUSTMENT

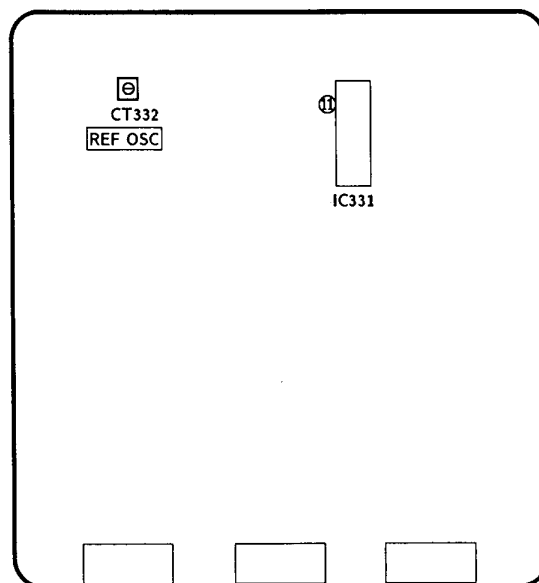


A BOARD (COMPONENT SIDE)

TUNER AGC ADJUSTMENT (VIF101, RV1)

1. Align with an appropriate signal between stations.
2. Adjust RV1 so that snow noise and cross modulation just disappear from the picture.

4-3. B BOARD ADJUSTMENT

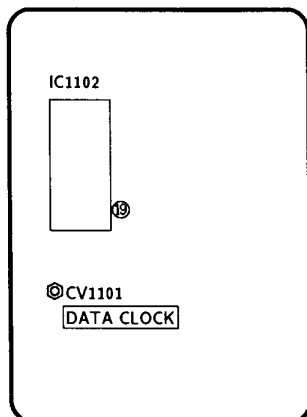


B BOARD (COMPONENT SIDE)

REFERENCE OSCILLATOR ADJUSTMENT (CT332 8.8MHz)

1. Input a PAL colour bar signal.
2. Ground pin ⑪ of the IC331.
3. Adjust CT332 to obtain synchronization.

4-2. A1 BOARD ADJUSTMENT

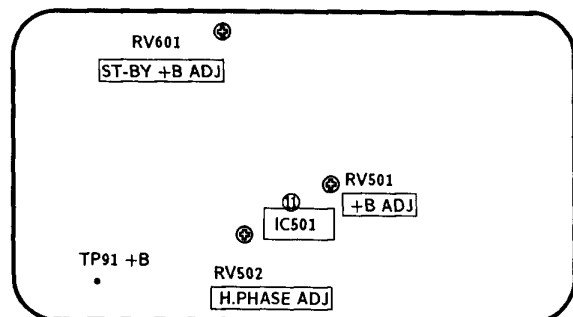


A1 BOARD (COMPONENT SIDE)

DATA CLOCK Adjustment (CV1101)

1. Tune in a no signal.
2. Connect a frequency counter to pin ⑪ of IC1102 (PCLK) through a probe of 10:1.
3. Adjust CV1101 (DATA CLOCK) so that frequency becomes $728.022\text{KHz} \pm 1\text{Hz}$.

4-4. D BOARD ADJUSTMENTS



D BOARD (COMPONENT SIDE)

+B ADJUSTMENT (RV501)

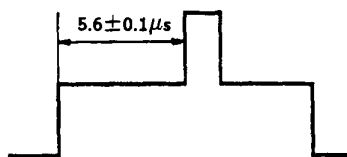
1. Connect the digital multimeter to TP91.
2. Adjust RV501 to obtain $135 \pm 0.2V$.

ST-BY +B ADJUSTMENT (RV601)

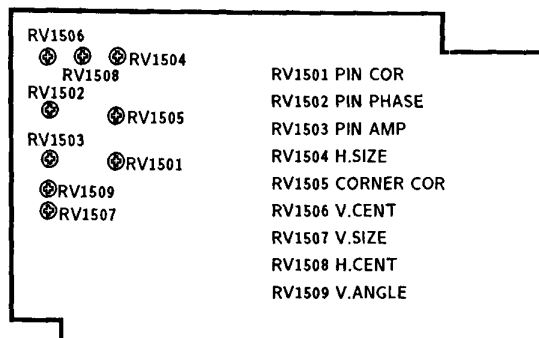
1. Put the system into ⏻ standby mode (remote commander).
2. Connect the digital multimeter to TP91.
3. Adjust RV601 to obtain $135 \pm 3V$.
4. Take the system out of ⏻ standby mode (remote commander).

H.PHASE ADJUSTMENT (RV502)

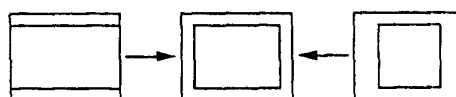
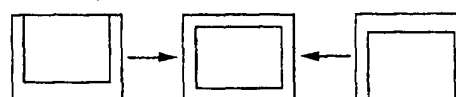
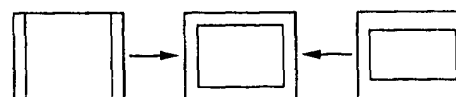
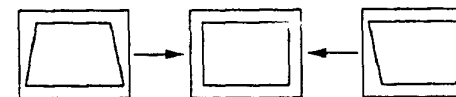
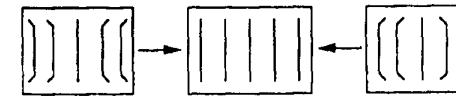
1. Input a PAL colour bar signal.
2. Set the picture and brightness controls to their normal levels.
3. Set RV1508 (H.CENT) to its mechanical center.
4. Connect the oscilloscope to pin ⑪ (SCP) of IC 501.
5. Rotate RV502 to adjust to $5.6 \pm 0.1\mu s$.



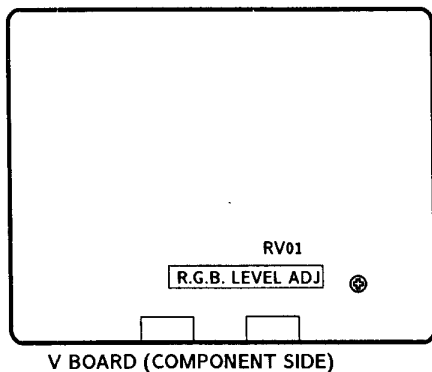
4-5. J1 BOARD ADJUSTMENTS



J1 BOARD (COMPONENT SIDE)

RV1508
H. CENT (HORIZONTAL CENTER)RV1504
H. SIZE (HORIZONTAL SIZE)RV1506
V. CENT (VERTICAL CENTER)RV1507
V. SIZE (VERTICAL SIZE)RV1509
V. ANGLE (VERTICAL ANGLE)RV1503
PIN AMP (PINCUSHION AMPLIFIER)RV1502
PIN PHASE (PINCUSHION PHASE)RV1501
PIN. COR (PINCUSHION CORRECT)RV1505
CORNER COR (CORNER CORRECT)

4-6. V BOARD ADJUSTMENT



RGB LEVEL ADJUSTMENT (RV01)

1. Maximize the picture setting.
2. Adjust RV01 so that the RGB output is 0.75V.

4-7. SECONDARY ADJUSTMENTS

SUB BRIGHTNESS ADJUSTMENT

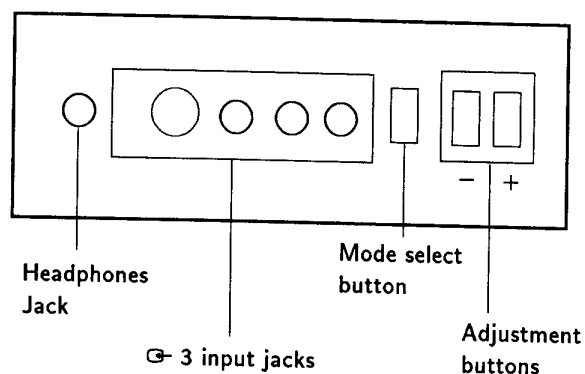
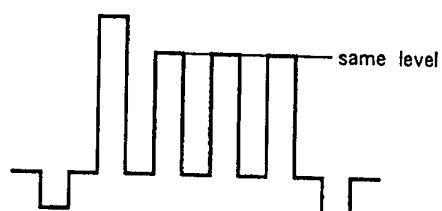
1. Set the system to receive a test pattern.
2. Press $\rightarrow \bullet \leftarrow$ on the remote commander to put the system into normal mode.
3. Switch off the power.
4. While depressing the adjusting buttons + and - simultaneously, turn on the power. (SUB mode is obtained)
5. Minimize the \odot contrast setting.
6. Adjust the \odot brightness control so that the gray scale 0 IRE section is cut off completely and the 20 IRE section is barely glowing.
7. Depress the \diamond (store) button of the remote commander.
(SUB mode is released)

If there is no test colour pattern

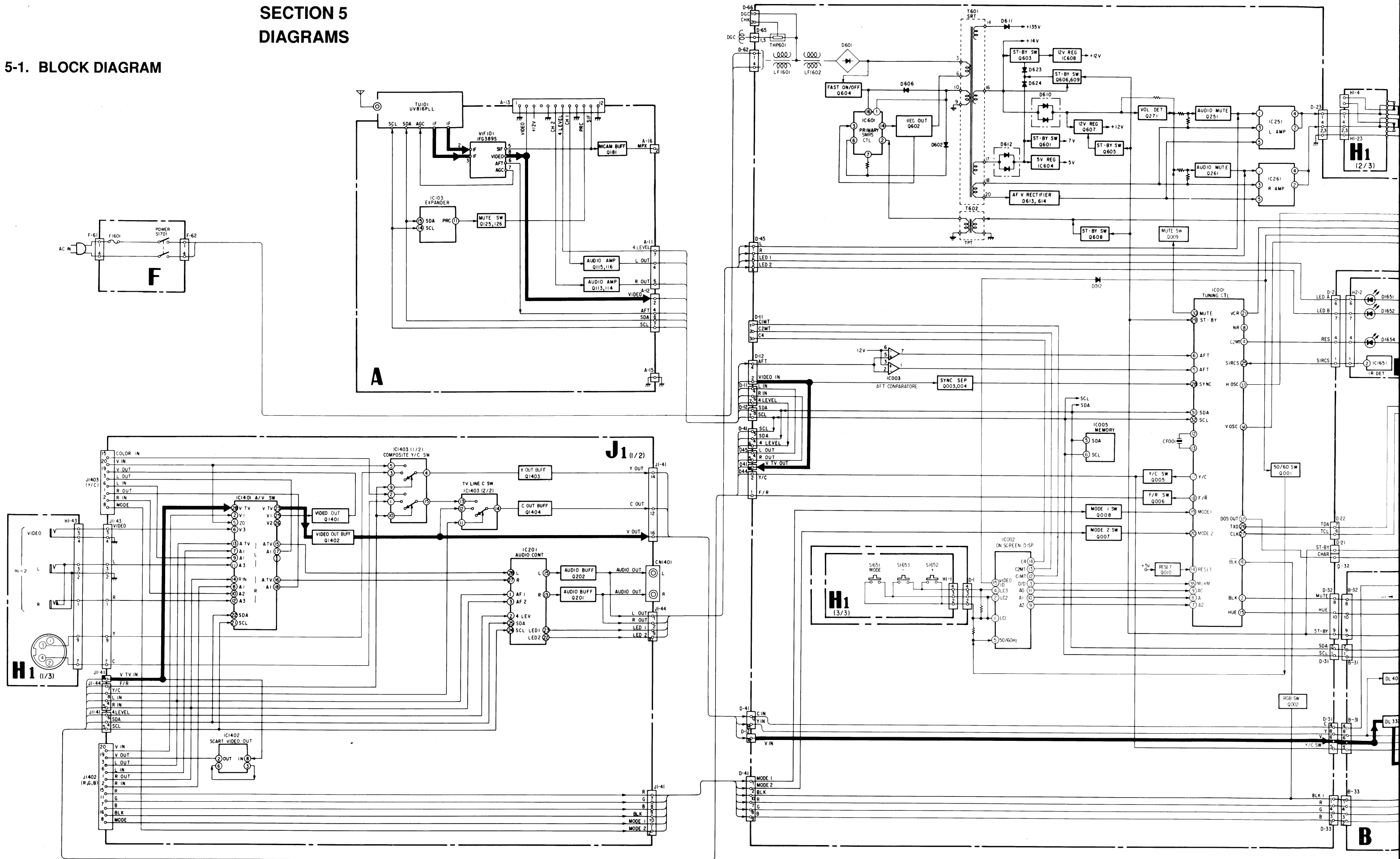
1. Set the system to receive a colour pattern.
2. Press $\rightarrow \bullet \leftarrow$ on the remote commander to put the system into normal mode.
Set the \odot color to its normal state.
- 3-5. Steps are the same as above.
6. Since 20 IRE is nearly blue, adjust the \odot brightness control so that the blue barely glows.
7. Same as step 7 above.
8. Press $\rightarrow \bullet \leftarrow$ on the remote commander to put the system into normal mode.

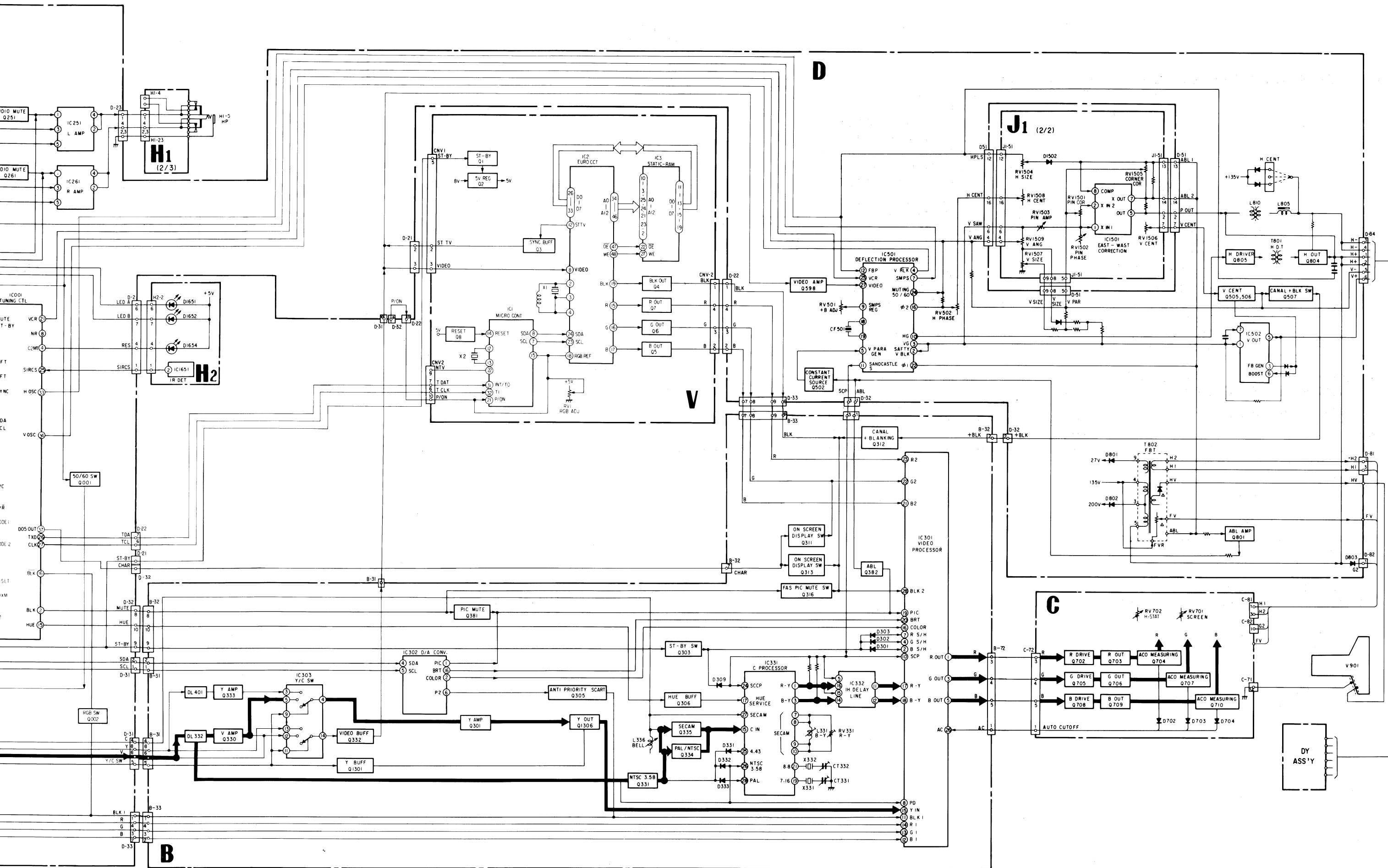
SUB COLOR ADJUSTMENT

1. Set the system to receive color bars.
2. Press $\rightarrow \bullet \leftarrow$ on the remote commander to put the system into normal mode.
3. Cut off the power.
4. While depressing the adjustment buttons + and - simultaneously, turn on the power. (SUB mode is obtained).
5. Adjust the colour control so that the B out waveform (pin ⑤ of C board connector CNC72) is as shown in the figure below.
6. Depress the \diamond (store) button of the remote commander. (SUB mode is released)

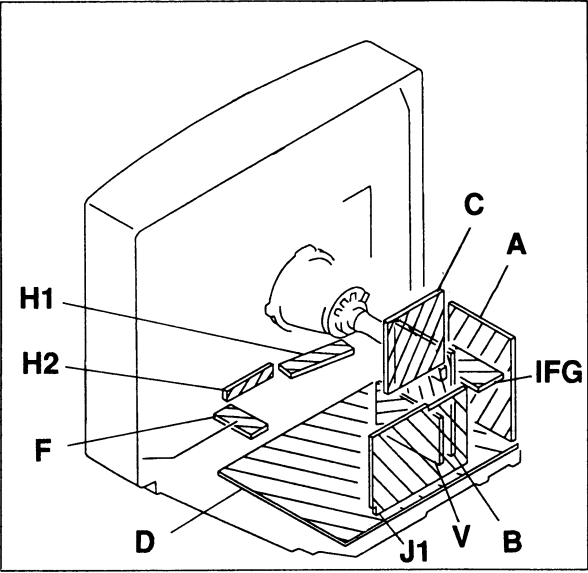


5-1. BLOCK DIAGRAM





5-2. CIRCUIT BOARDS LOCATION



5-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

— Conductor Side —

Note:

- All capacitors are in μF unless otherwise noted.
pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All electrolytics are in 50V unless otherwise specified.
- All resistors are in ohms.
 $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm

Rating electrical power 1/4W

- METAL FILM (:RN) resistors in 1%, 1/6W unless otherwise specified.
- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M Ω digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- : B+ bus.
- : signal path. (RF)
- Circled numbers are waveform references.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METALOXIDE
	: RB	NONFLAMMABLE CEMENT
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note:

The components identified by shading and mark are critical for safety. Replace only with part number specified.

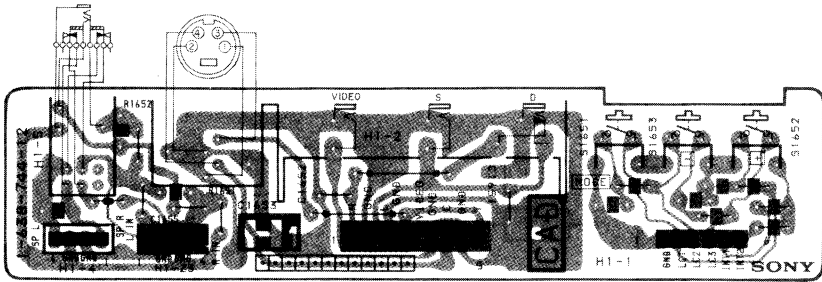
H1 [CONTROL SW, AV INPUT, HEADPHONE]

H2 [SIRCS, RECEIVER, INDICATOR]

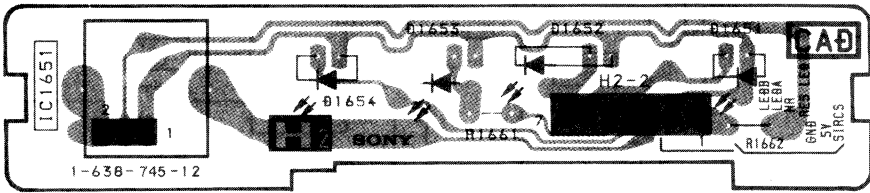
F [AC IN, POWER SW]

A [TUNING SW, POWER SW]

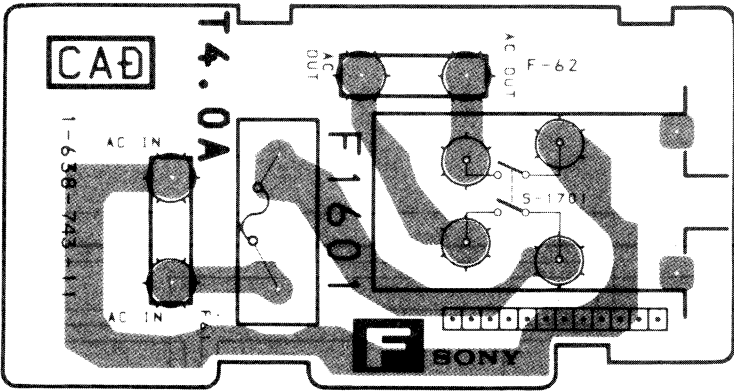
— H1 Board —



— H2 Board —

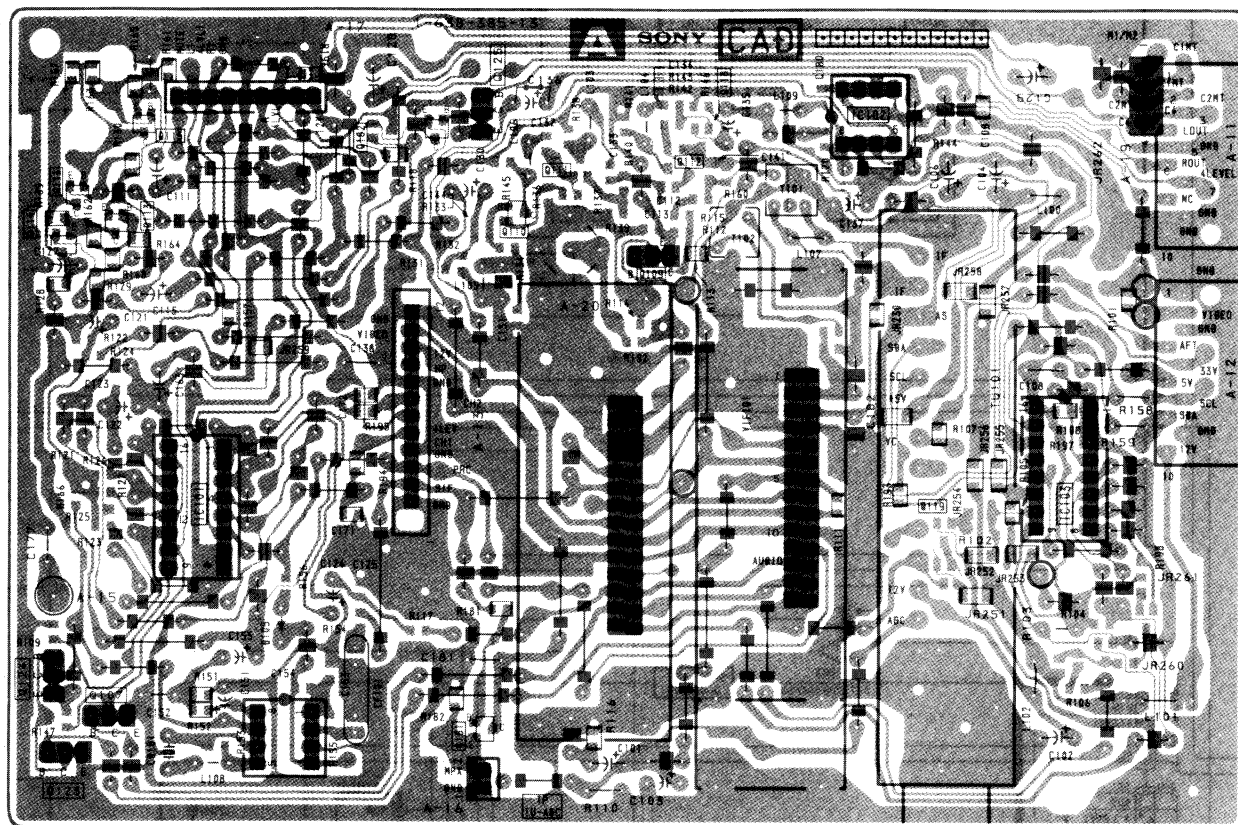


— F Board —



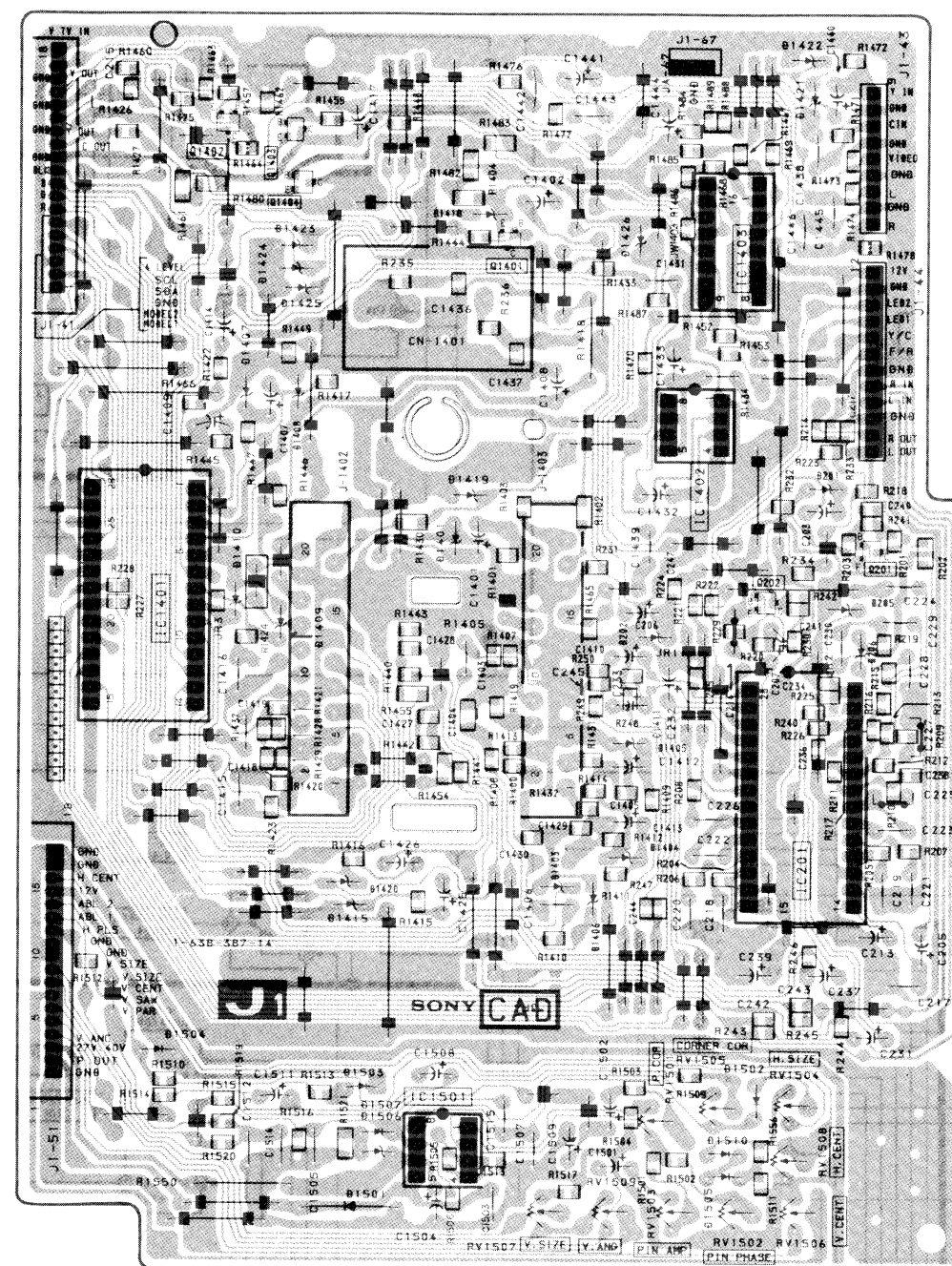
A [TUNER, SIF, VIF]

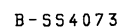
— A Board —



J1 [AUDIO CONTROL, AV INPUT, Y/C INPUT,
VIDEO OUT, EAST-WEST CORRRECTION]

— J1 Board —





— A Board —

①

1.1Vp-p (H)

— A Board —

①

1.1Vp-p (H)

S1652

S1653

S1651

MODE

C1652 100p

R

L

V1BED

H1-02

S-V1BED

H1-05

HP

H1

(CONTROL SW
AV INPUT
HEADPHONE)

C1655 0.001

R1652 470

R1651 470

C1653 0.001

AUDIO R

AUDIO L

AUDIO R

AUDIO L

H1-1 6P RED TO Ø BOARD Ø-1

H1-43 9P WHT TO J1 BOARD J1-43

H1-23 4P BLK TO Ø BOARD Ø-23

H1-4 4P WHT TO SPEAKERS

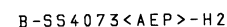
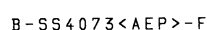
6	Y/C INIT
5	AV3 INIT
4	LC3
3	LC2
2	LC1
1	GND

1	R OUT
2	GND
3	L OUT
4	GND
5	V1BED OUT
6	GND
7	C OUT
8	GND
9	Y OUT

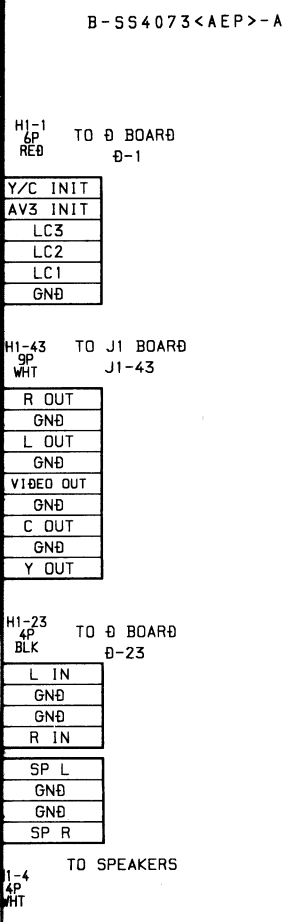
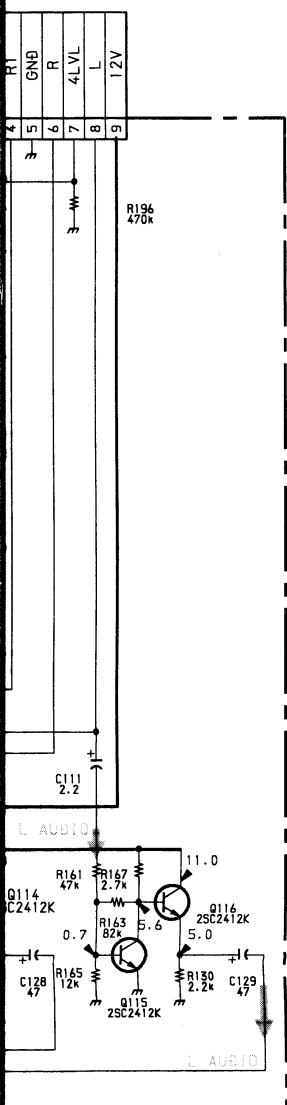
1	L IN
2	GND
3	GND
4	R IN
4	SP L
3	GND
2	GND
1	SP R

B-SS4073<AEP>-H1

The diagram illustrates the system architecture, showing the connection between the Interrupt Logic, LP Filter, Input Filter, I²C Bus Control, Shift Register, and I/O Ports. The system is connected to a vertical bus on the left (pins 13, 1, 2, 3, 14, 15) and a vertical bus on the right (pins 4, 5, 6, 7, 8, 9, 10, 11, 12). The Interrupt Logic is connected to pins 13 and 1. The LP Filter is connected to pins 13 and 1. The Input Filter is connected to pins 14 and 15. The I²C Bus Control is connected to pins 1, 2, 3, 14, and 15. The Shift Register is connected to the I²C Bus Control and the I/O Ports. The I/O Ports are connected to pins 4 through 12. The Power-On Reset is connected to pins 16 and 8. The diagram also shows a 'Write pulse' and 'read pulse' signal path between the Shift Register and the I/O Ports.

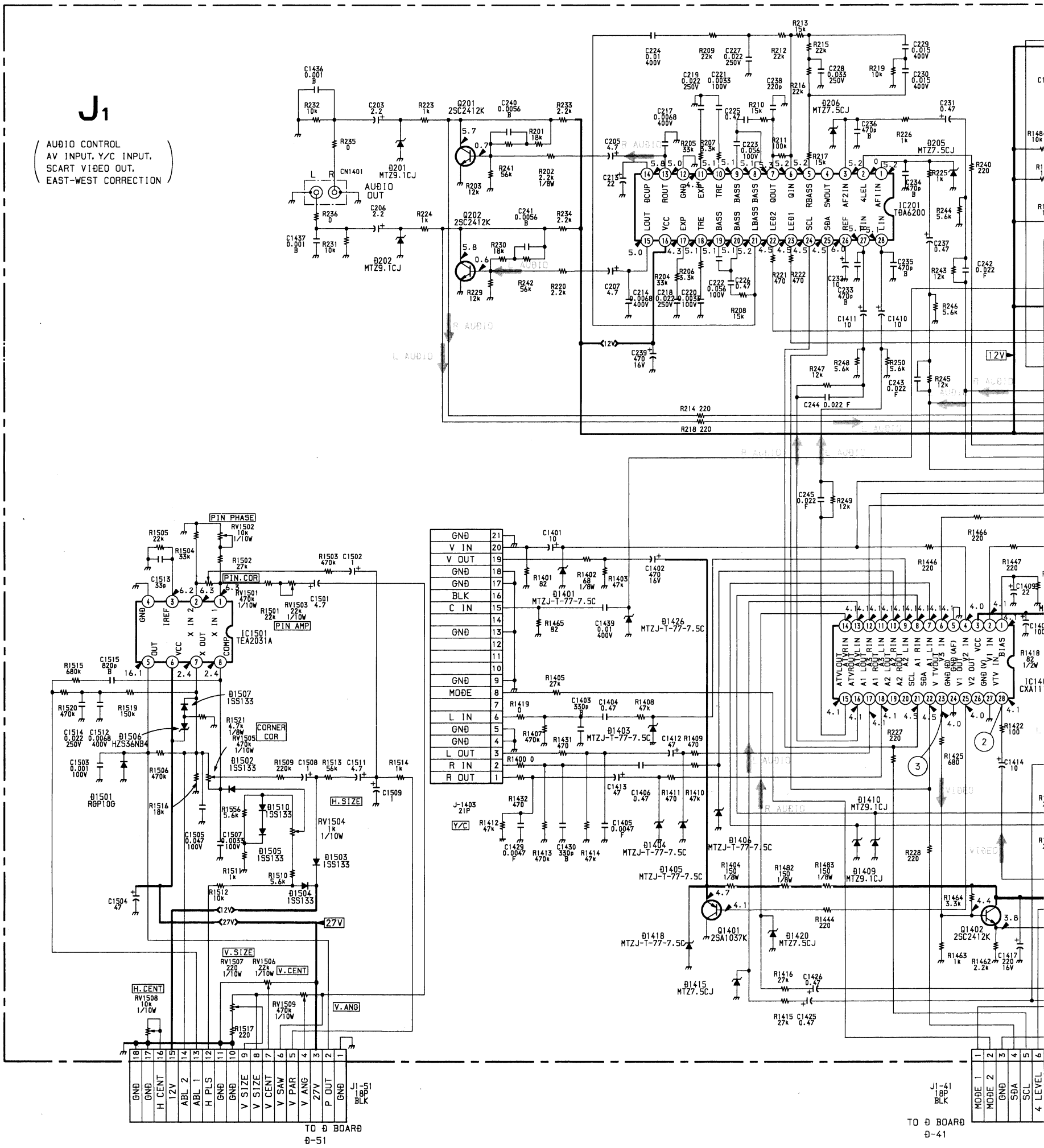
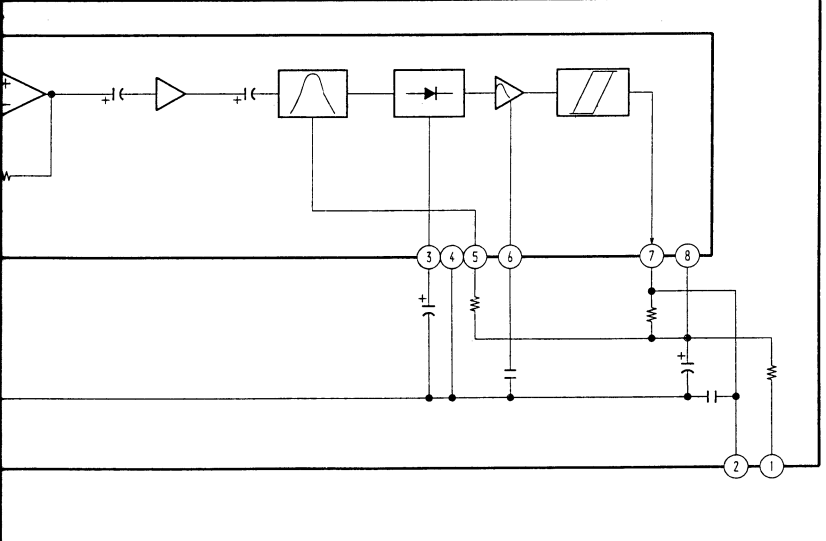


— 31 —

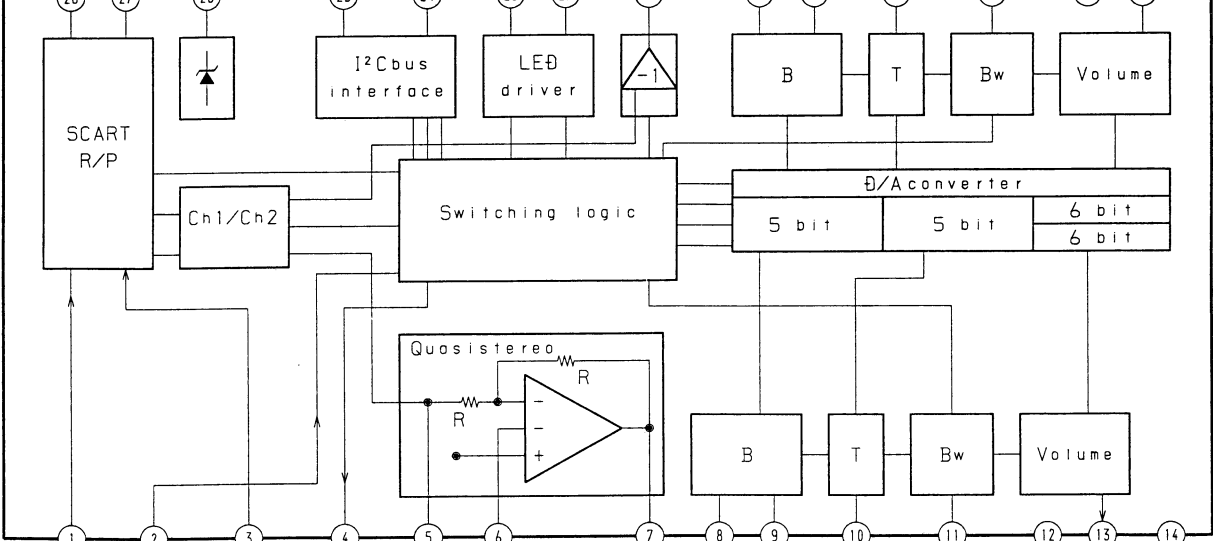


S4073<AEP>-H1

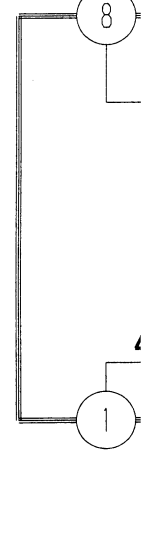
51 SBX1610-11

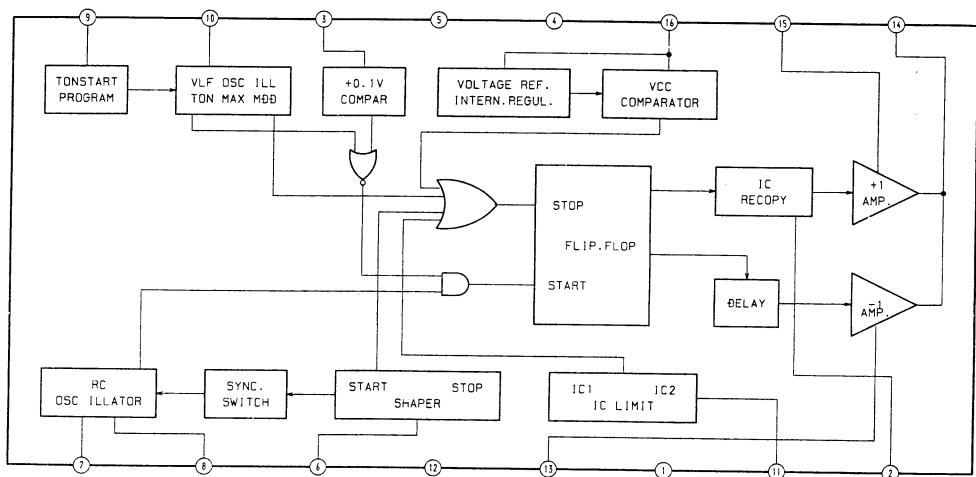
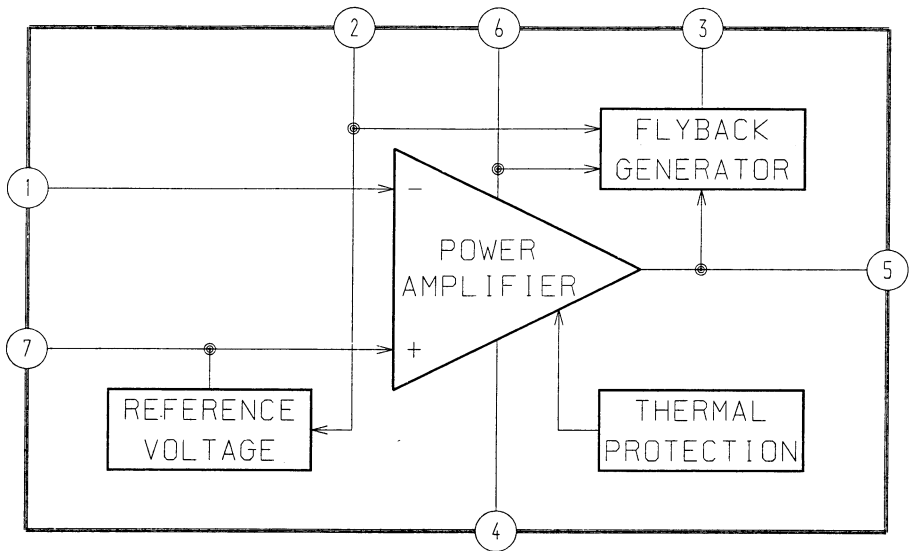
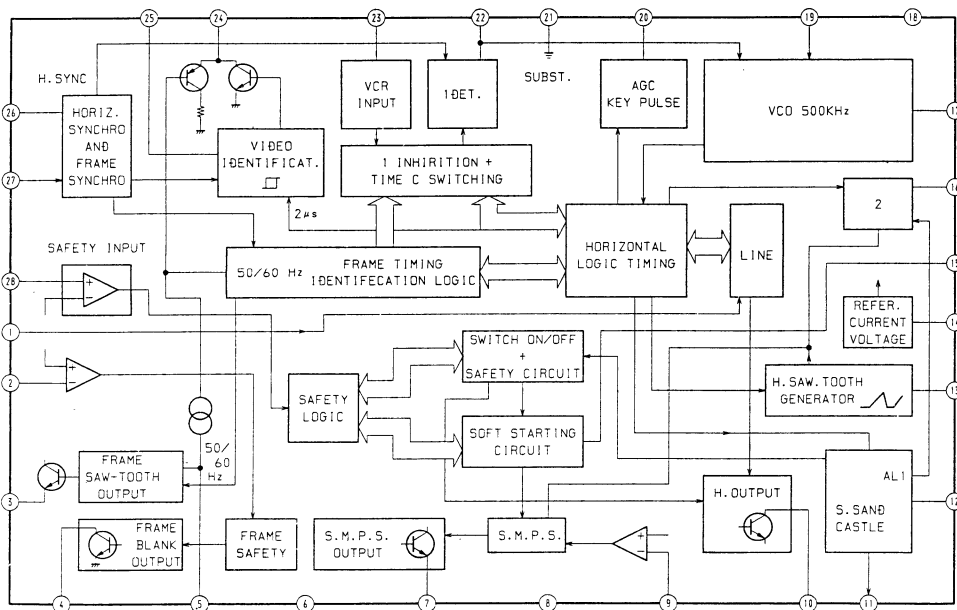
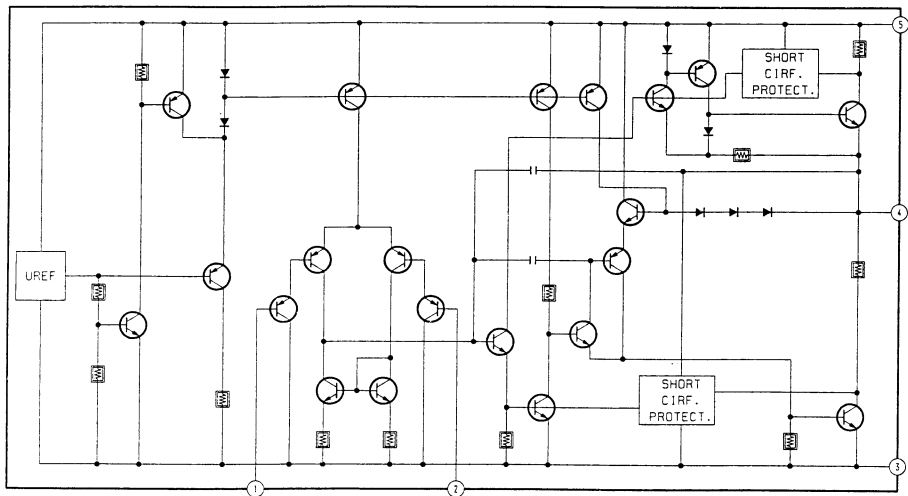


J1 BOARD IC201 TDA6200



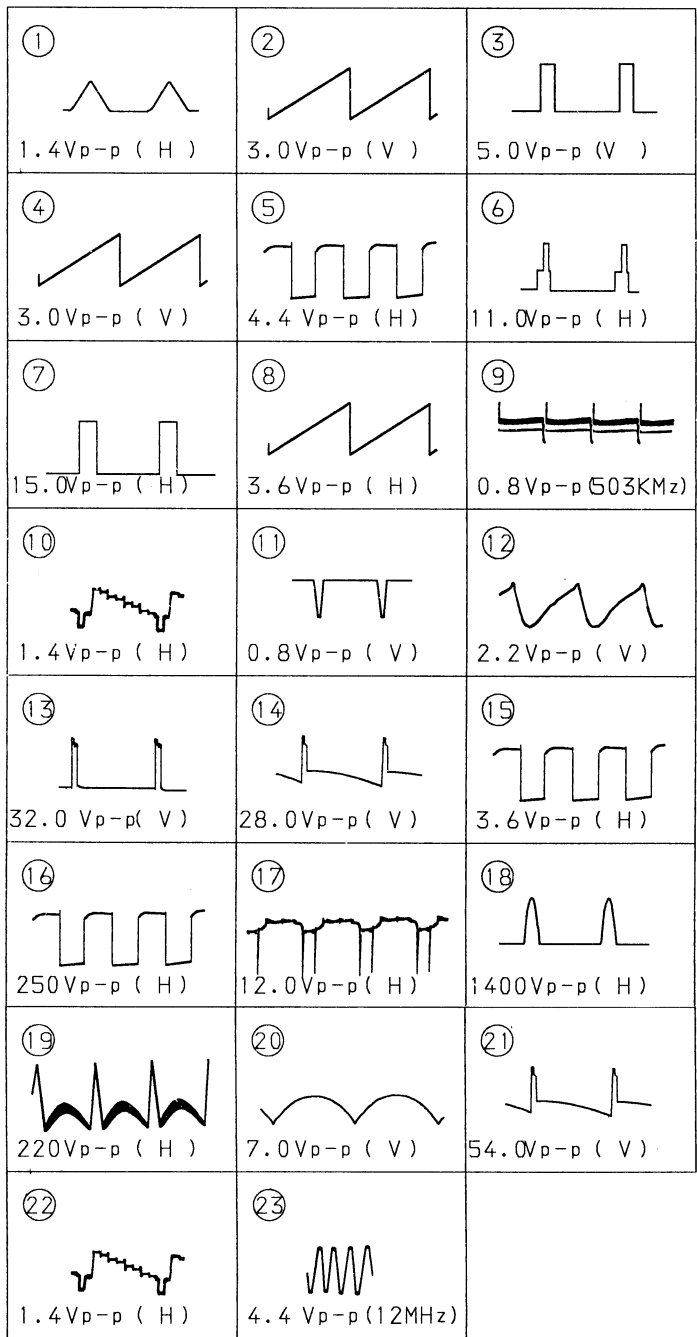
J1 BOARD





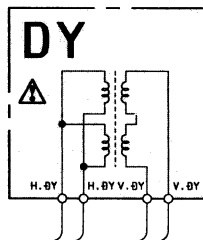
— D Board —

— D Board —



IC001	SDA20560-A012	TUNING CTL
IC002	MC14051BCP	ON SCREEN DISPLAY
IC003	BA4558	AFT COMPARATOR
IC005	SDA2546	MY MEMORY
IC251	TDA2050	AUDIO OUT (L)
IC261	TDA2050	AUDIO OUT (R)
IC501	TEA2028B	DEFLECTION PROCESSOR
IC502	TDA8170	V OUT
IC601	TEA2260	PRIMARY SMRS CTL
IC604	TEA7605	+5V REG
IC608	MC7812CT	+12V REG
Q001	0TC144EK	50/60Hz SW
Q002	0TC144EK	BLK SW
Q003	2SA1037K	SYNC SEPARATOR
Q004	2SA1037K	SYNC SEPARATOR
Q005	0TC144EK	Y/C SW
Q006	0TC144EK	FRONT/REAR SW
Q007	2SC2412K	MODE 2 SWITCH
Q008	2SC2412K	MODE 1 SWITCH
Q009	2SC2412K	MUTE SW
Q010	2SC2412K	RESET
Q251	2SC2412K	AUDIO MUTE
Q261	2SC2412K	AUDIO MUTE
Q271	2SC2412K	VOLTAGE DETECT
Q502	2SA1037K	CONSTANT CURRENT SOURCE
Q505	2SB774	V CENT
Q506	2SB734	V CENT
Q507	2SA1037K	CANAL +BLK
Q598	2SA1037K	VIDEO AMP
Q601	2SB1357T114EF	STBY SW
Q602	2SB1548	REG OUT
Q603	2SB1357T114EF	STBY SW
Q604	2SA1037K	FAST ON/OFF
Q605	2SC2412K	STBY SW
Q606	2SC2412K	STBY SW
Q607	2SB2096-EF	+12V REG
Q608	2SC2412K	STBY SW
Q609	2SB789-3	STBY SW
Q801	2SC2412K	ABL AMP
Q804	2SB1941	H OUT
Q805	2SC2688	H DRIVER

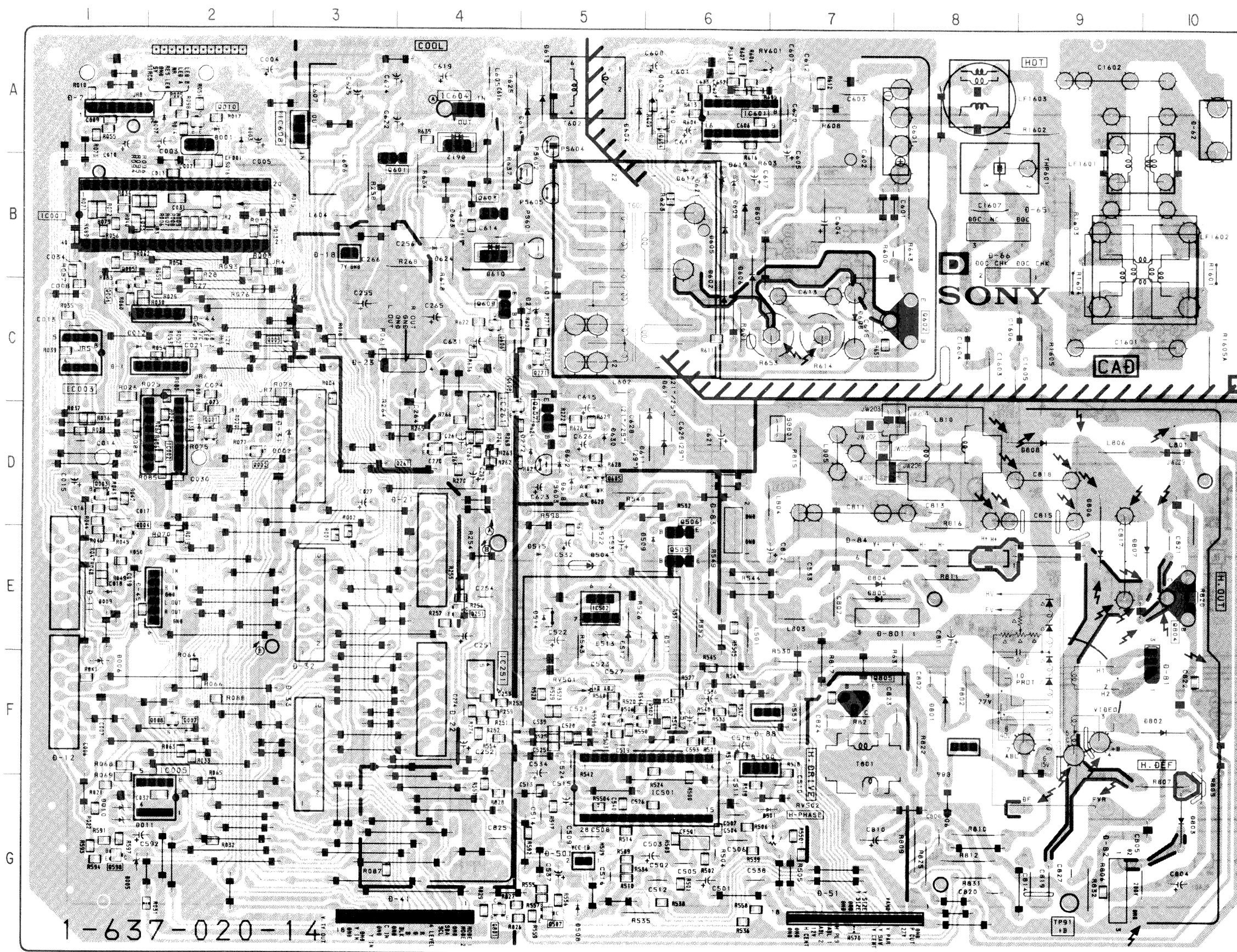
0003	1SS133	HUE CTL
0005	MTZJ5.6B	PROTECT
0006	MTZJ33A	VC VOLTAGE REGULATION
0007	MTZJ3.9B	PROTECT RESET
0009	MTZJ5.6B	CLIPPING SYNC LEVEL
0010	MTZJ6.2B	PROTECT
0011	MTZJ6.2B	PROTECT
0012	1SS133	PROTECT
0013	MTZJ6.8C	PROTECT
0271	MTZJ13B	VOLTAGE DETECT
0272	1SS133	DECOUPLING MUTE AUDIO
0501	1SS133	SOFT START
0504	GP080PKG23	V PULSE OUT
0506	0A204K	CURRENT REG
0508	1SS133	CANAL +BLK LEVEL
0511	GP080PKG23	PROTECT
0512	GP080PKG23	PROTECT
0513	MTZJ4.7B	PROTECT
0601	043B60L-F	AC RECT
0602	RGP10GPKG23	REF RECT
0603	GP080PKG23	SMPS DRIVE 1
0604	GP080PKG23	SMPS DRIVE 2
0605	GP080PKG23	SMPS DRIVE 3
0606	RGP10GPKG23	+12V RECT
0607	RGP10GPKG23	REF RECT
0608	ERC25-06S	PLUSE CLIPPER
0609	MTZJ33A	FAST ON/OFF
0610	CTU-12S	+14V RECT
0611	ERD29-08J	+135V RECT
0612	CTU-12S	+7V RECT
0613	RGP15J-6040G23	AF V RECT-1
0614	RGP15J-6040G23	AF V RECT-2
0616	MTZJ6.2B	+12V REG
0617	1SS133	PROTECT
0618	MTZJ5.6B	+12V REF
0619	MTZJ33A	FAST ON/OFF-2
0620	0A204K	+12V REF
0621	MTZJ33A	FAST ON/OFF-3
0622	1SS133	PROTECT
0623	1SS133	DECOUPLING STBY
0624	1SS133	DECOUPLING DTBY
0630	MTZJ15A	+12V RECT
0801	RGP10GPKG23	+27V RECT
0802	RGP10GPKG23	+200V RECT
0803	RGP02-17PKG23	G2 RECT
0804	GP080PKG23	H CENTER-1
0805	GP080PKG23	H CENTER-2
0806	ERC06-15S	H DAMPER-1
0808	ERD28-08S	PIN DAMPER



D

TUNING CONTROL, POWER CONTROL,
AUDIO OUT, H/V OUT

— D Board —



— D Board —

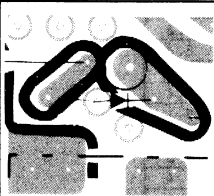
IC		
IC001	B-2	D012 C-1
IC002	D-2	D013 D-2
IC003	C-1	D271 C-5
IC005	G-2	D272 D-5
IC251	F-4	D501 G-7
IC261	D-4	D504 E-5
IC501	G-6	D506 F-5
IC502	E-5	D508 G-5
IC601	A-6	D509 E-6
IC604	A-4	D511 E-6
IC608	A-3	D512 E-5
		D513 E-5
		D514 E-5
		D515 E-5
		D601 A-8
		D602 C-6
		D603 A-6
		D604 A-5
		D605 B-6
		D606 B-6
		D607 B-6
		D608 C-7
		D609 B-6
		D610 B-4
		D611 D-6
		D612 A-4
		D613 A-5
		D614 A-5
		D616 D-5
		D617 B-6
		D618 D-5
		D619 B-6
		D620 D-5
		D621 B-6
		D622 D-5
		D623 B-4
		D624 B-4
		D630 D-5
		D801 F-8
		D802 F-10
		D803 G-10
		D804 E-7
		D805 E-7
		D806 E-9
		D807 E-10
		D808 D-9
TRANSISTOR		
Q001	D-2	
Q002	D-2	
Q003	D-1	
Q004	E-1	
Q005	C-1	
Q006	C-1	
Q007	F-2	
Q008	F-2	
Q009	C-3	
Q010	A-2	
Q251	E-4	
Q261	D-4	
Q271	C-5	
Q502	F-6	
Q505	E-6	
Q506	D-6	
Q507	G-5	
Q598	G-1	
Q601	B-3	
Q602	C-8	
Q603	B-4	
Q604	A-6	
Q605	D-5	
Q606	C-4	
Q607	D-5	
Q608	D-4	
Q609	C-4	
Q801	G-4	
Q804	E-10	
Q805	F-7	
VARIABLE RESISTOR		
RV501	F-5	
RV502	G-7	
RV601	A-6	
DIODE		
D001	A-2	
D002	D-3	
D003	A-2	
D005	G-1	
D006	F-1	
D007	A-2	
D009	E-1	
D010	G-1	
D011	G-1	
TP		
TP91	G-9	

D012	C--1
D013	D--2
D271	C--5
D272	D--5
D501	G--7
D504	E--5
D506	F--5
D508	G--5
D509	E--6
D511	E--6
D512	E--5
D513	E--5
D514	E--5
D515	E--5
D601	A--8
D602	C--6
D603	A--6
D604	A--5
D605	B--6
D606	B--6
D607	B--6
D608	C--7
D609	B--6
D610	B--4
D611	D--6
D612	A--4
D613	A--5
D614	A--5
D616	D--5
D617	B--6
D618	D--5
D619	B--6
D620	D--5
D621	B--6
D622	D--5
D623	B--4
D624	B--4
D630	D--5
D801	F--8
D802	F--10
D803	G--10
D804	E--7
D805	E--7
D806	E--9
D807	E--10
D808	D--9

VARIABLE
RESISTOR

RV501	F--5
RV502	G--7
RV601	A--6

TP	
TP91	G--9



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

The block diagram illustrates the internal architecture of the PAL/SECAM decoder. It features several interconnected functional blocks:

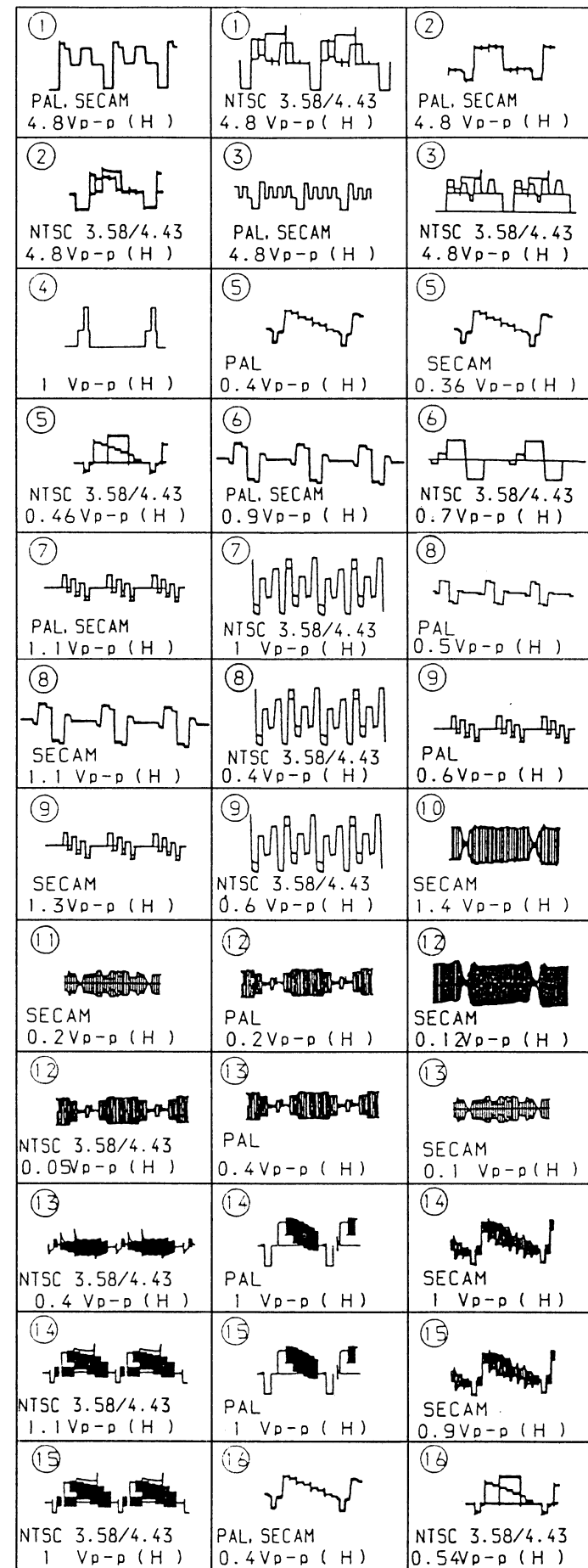
- System Control:** A block on the left containing 'system-control', 'standstill', 'scanning', and 'standstill-sel.' sub-blocks, which manage the overall timing and state of the decoder.
- ACC and ACC Sel:** An 'ACC' (accumulator) and an 'ACC sel.' (accumulator select) block are used for address generation and selection.
- Demodulation and SECAM Processing:** The core of the decoder includes a 'demodulator', a 'SECAM ref.' (reference) block, a 'SECAM clamp', and a 'demodpn' (demodulation phase noise) block. These handle the demodulation of the received signal and the specific SECAM color processing.
- Color and Timing Control:** A 'colour-killer buffer' is used to manage color signals. A 'HUE control' block allows for manual adjustment of the hue. A 'service' block handles various control signals.
- Signal Generation and Selection:** A '2X10 oscillator/pal/ntsc divider/pal/ntsc pll' block generates the necessary timing signals for both PAL and SECAM standards. A 'pulse-processing' block and a 'sound/silence pulse selector' are also shown, handling external control signals.

The diagram uses a complex network of lines and arrows to show the flow of data and control signals between these various components, with some lines labeled with numbers (1-10) and others with letters (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z).

The diagram illustrates the internal circuitry of a color television receiver, showing the flow of video signals and the control logic. Key components and their functions include:

- FAST SWITCH 1:** Processes the input signals (R, Y, G, B, R-Y, B-Y) and provides a reference signal.
- MATRIX 1:** Converts the input signals into a format suitable for the contrast and brightness controls.
- CONTRAST and BRIGHTNESS:** Control blocks that adjust the luminance and color difference signals based on user input (MK).
- MATRIX 2:** Converts the adjusted signals back into the original color format (R, Y, G, B, R-Y, B-Y).
- CLAMPING AND FAST SWITCH 2:** Processes the signals for clamping and fast switching, providing a clamping pulse (CL) to the sandcastle detector.
- SANDCASTLE DETECTOR and COUNTER LOGIC:** Detects the sandcastle signal and provides control signals (MK, MT, LM) to the counter logic and other components.
- BLANKING and COMPARATOR:** Control blocks that manage the blanking signal and compare the signals for output.
- DELAY and PEAK DRIVE LIMITER:** Delay the signals and limit the peak drive to protect the output stage.
- LEAKAGE STORAGE:** Stores the signals to prevent leakage and maintain the image quality.

The diagram also shows the connection to a peak drive limiter and a leakage storage unit, which are essential for maintaining the quality and stability of the video signal.



IC301	TDA4580-V7	VIDEO PROCESSOR
IC302	TDA8442-N3	Ø/A CONVERTER IC BUS
IC303	MC14053BPC	Y/C COMP SW
IC331	TDA4650-V4	COLOR PROCESSOR
IC332	TDA4660V2	1H-DELAY
Q301	25C2412K	Y BUFFER
Q303	25C2412K	STBY SW
Q305	ØTA144EK	ANTI PRIORITY SCART
Q306	JC501TP	VIDEO BUFF
Q311	25C2412K	ON SCREEN ØISPLAY SW
Q312	25C2412K	CANAL +BLK
Q313	25C2412K	ON SCREEN ØISPLAY
Q316	25C2412K	FAS PICTURE MUTE SW
Q330	25A1037K	VIDEO AMP
Q331	ØTC124EK	NTSC SW
Q332	25A1037K	VIDEO BUFF
Q333	25A1037K	Y AMP
Q334	25C2412K	PAL/NTSC SW
Q335	25C2412K	SECAM SW
Q381	ØTC124EK	MUTE
Q382	25C2412K	ABL
Q1301	ØTC124EK	Y BUFF
Q1306	25C2412K	Y OUT
Ø301	15S133	ACO AT STBY
Ø302	15S133	ACO AT STBY
Ø303	15S133	ACO AT STBY
Ø304	15S133	ØECOUPLING BLK
Ø305	15S133	PROTECT
Ø307	MTZ11CJ	PROTECT
Ø309	15S133	PROTECT
Ø310	MTZ11CJ	PROTECT
Ø311	MTZ11CJ	PROTECT
Ø312	MTZ11CJ	PROTECT
Ø313	15S133	PROTECT
Ø314	15S133	PROTECT
Ø315	15S133	PROTECT
Ø316	15S133	PROTECT
Ø317	15S133	PROTECT
Ø318	15S133	PROTECT
Ø319	15S133	PROTECT
Ø320	15S133	PROTECT
Ø331	15S133	SECAM SW
Ø332	15S133	SECAM SW
Ø333	15S133	SECAM SW
Ø350	MTZ5.6CJ	PROTECT

As to the voltage value shown by the mark * on the Schematic Diagram, see the another list.

		PAL	SECAM	NTSC-5.8	NTSC-4.43
IC301	(1)	0.1	0.1	5.8	0.1
	(2)	6.7	6.8	5.1	5.1
IC331	(15)	3.1	3.6	3.1	2.8
	(11)	3.0	3.5	2.9	2.7
	(12)	5.6	5.6	7.1	7.2
	(13)	7.5	7.0	5.6	5.6
	(15)	0.1	0.1	0.1	5.8
	(16)	0.1	0.1	5.8	0.1
	(17)	0.1	5.8	0.1	0.1
	(18)	5.9	0.1	0.1	0.1
	Q331	(B)	0.1	0.1	5.8
(C)		1.5	1.9	0	0.8
Q333	(B)	3.4	4.4	4.4	4.4
Q334	(B)	4.9	0.1	4.8	4.8
Q335	(B)	0.1	4.8	0.1	0.1

ESSOR
 ER IC BUS
 ESSOR
 TY SCART
 DISPLAY SW
 DISPLAY
 MUTE SW
 BLK

by the
 m, see

43

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A

B

C

D

E

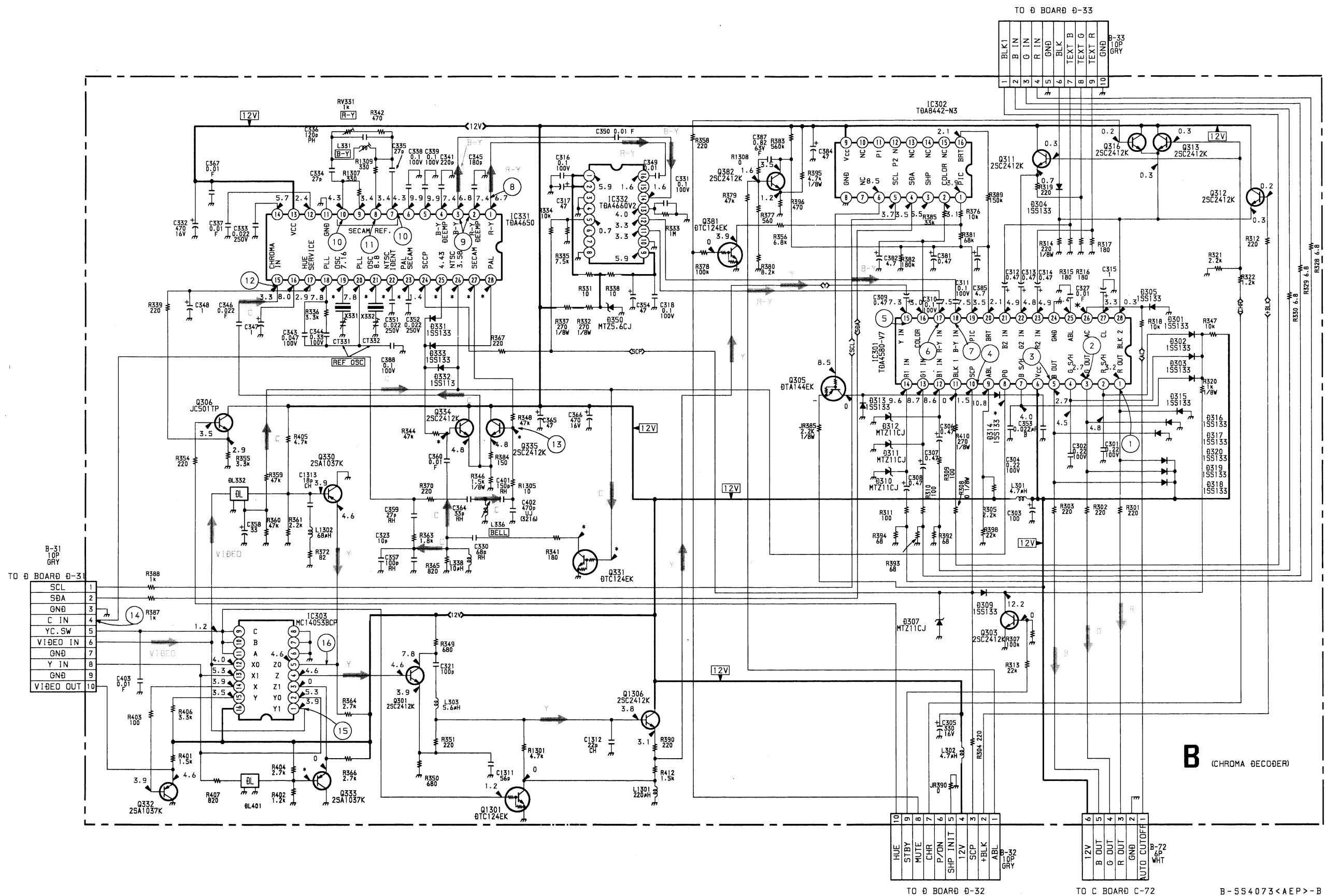
F

G

H

I

J



1 2 3 4 5 6 7 8 9 10 11

A

B

C

D

E

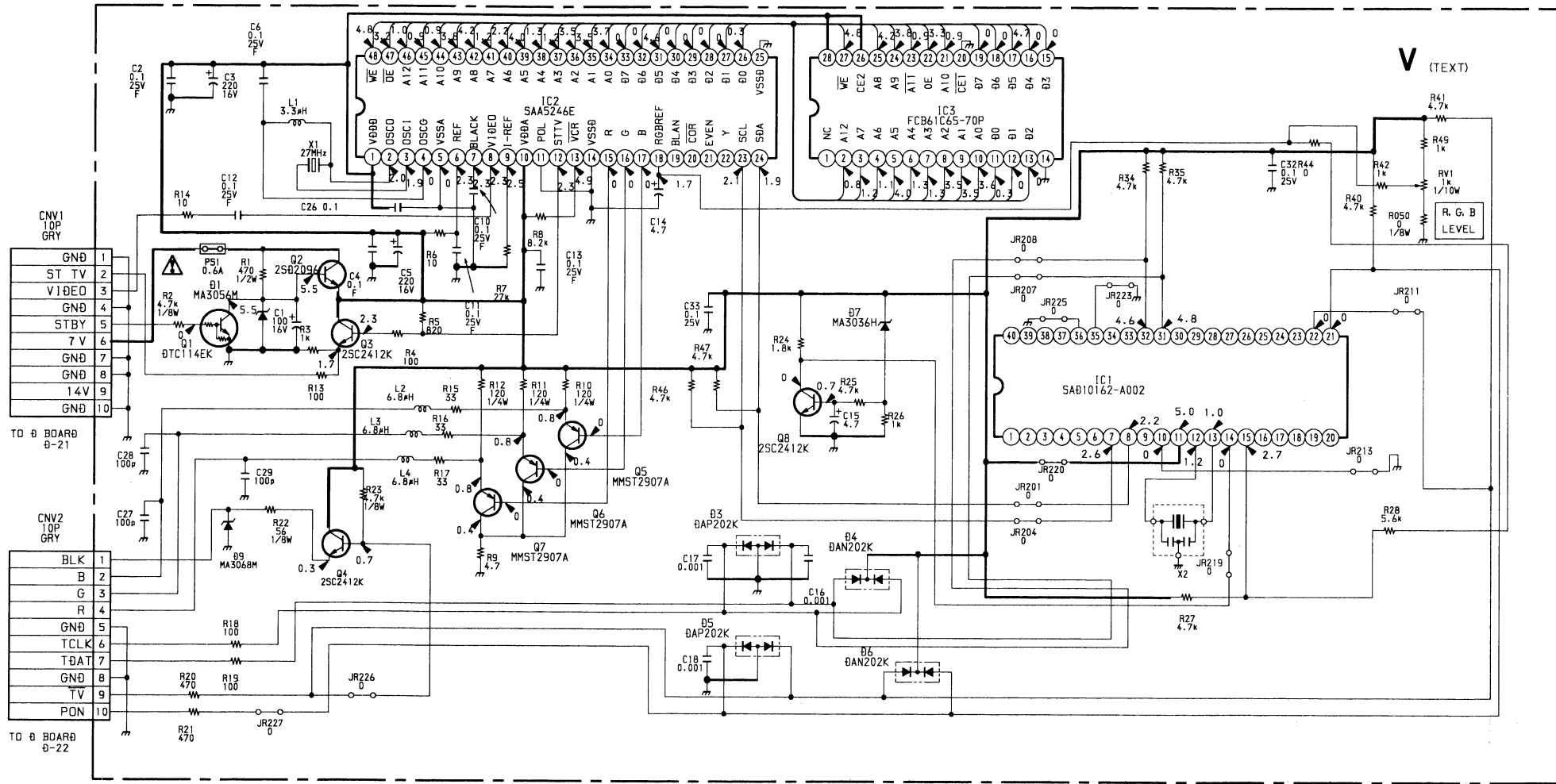
F

G

H

I

J



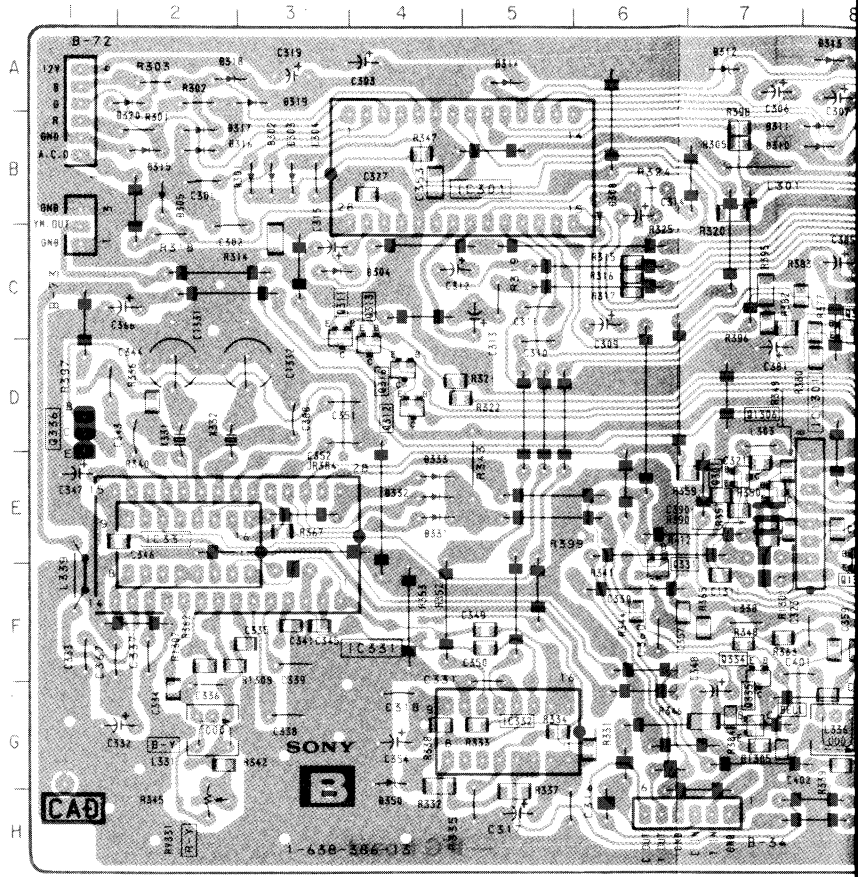
B-SS4073<AEP>-V

— V Board —

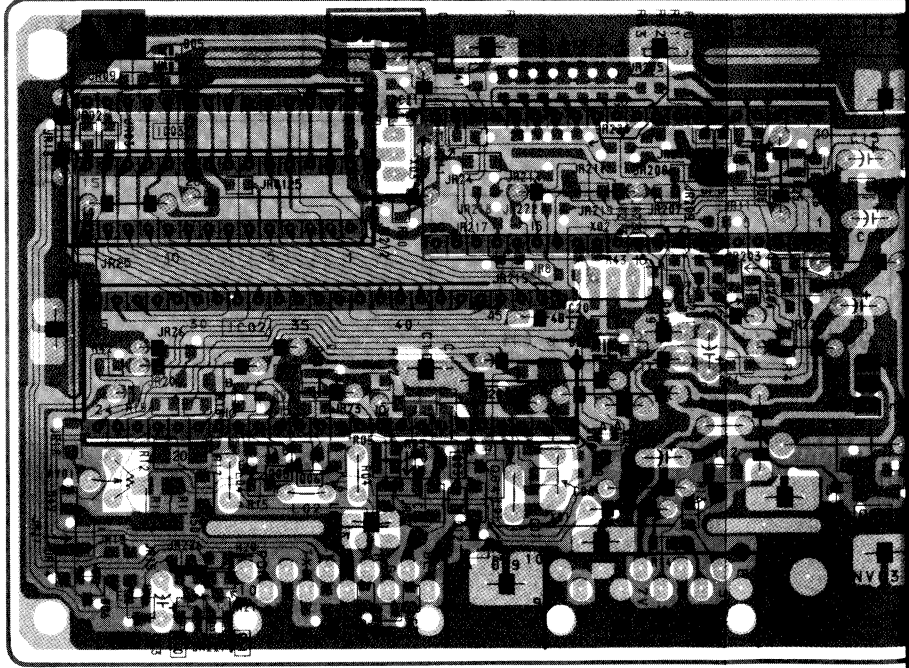
IC1	SBA20162-B002	MICRO-CONT
IC2	SAA5246E	IVT
IC3	FCB61C65L-70P	STATIC-RAM
Q1	ØTC114EK	STAND BY
Q2	2SØ2096	SV REG
Q3	2SC2412K	SYNC BUFFER
Q4	2SC2412K	BLK OUT
Q5	MMST2907A	B OUT
Q6	MMST2907A	G OUT
Q7	MMST2907A	R OUT
Q8	2SC2412K	P ON SW
Ø1	MA3056M	SV REG
Ø3	ØAP202K	PROTECT
Ø4	ØAN202K	PROTECT
Ø5	ØAP202K	PROTECT
Ø6	ØAN202K	PROTECT
Ø7	MA3036H	PROTECT
Ø9	MA3068M	PROTECT

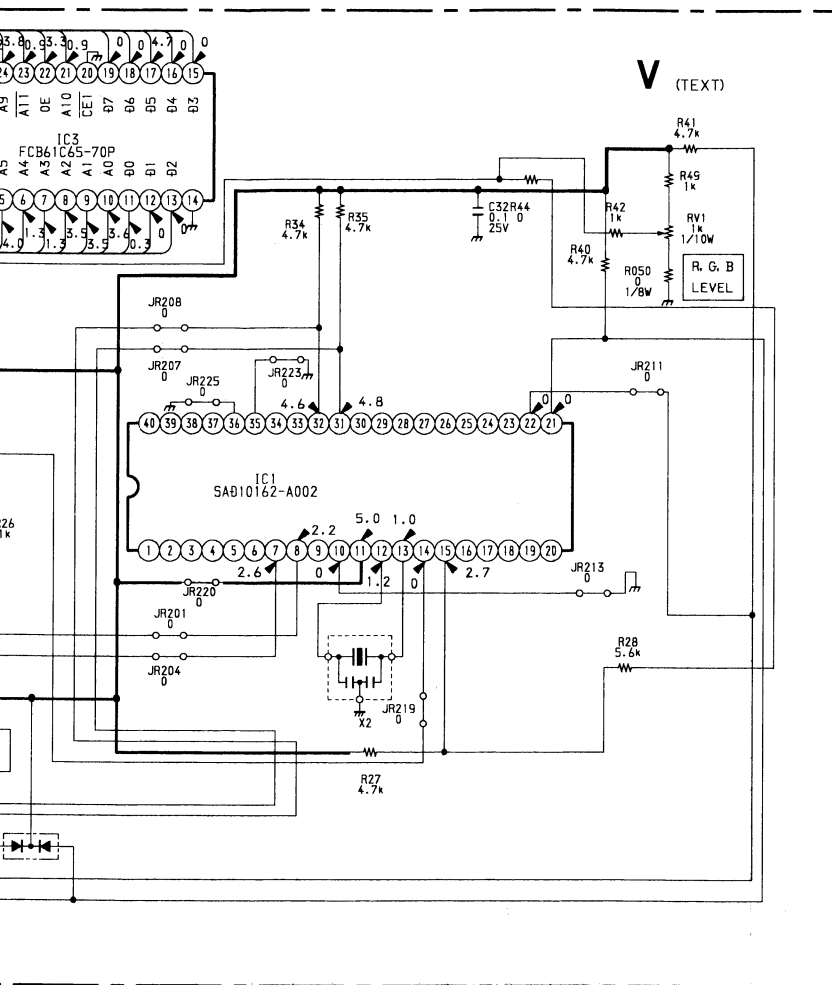
B [CHROMA DECODER] **V** [TEXT]

— B Board —

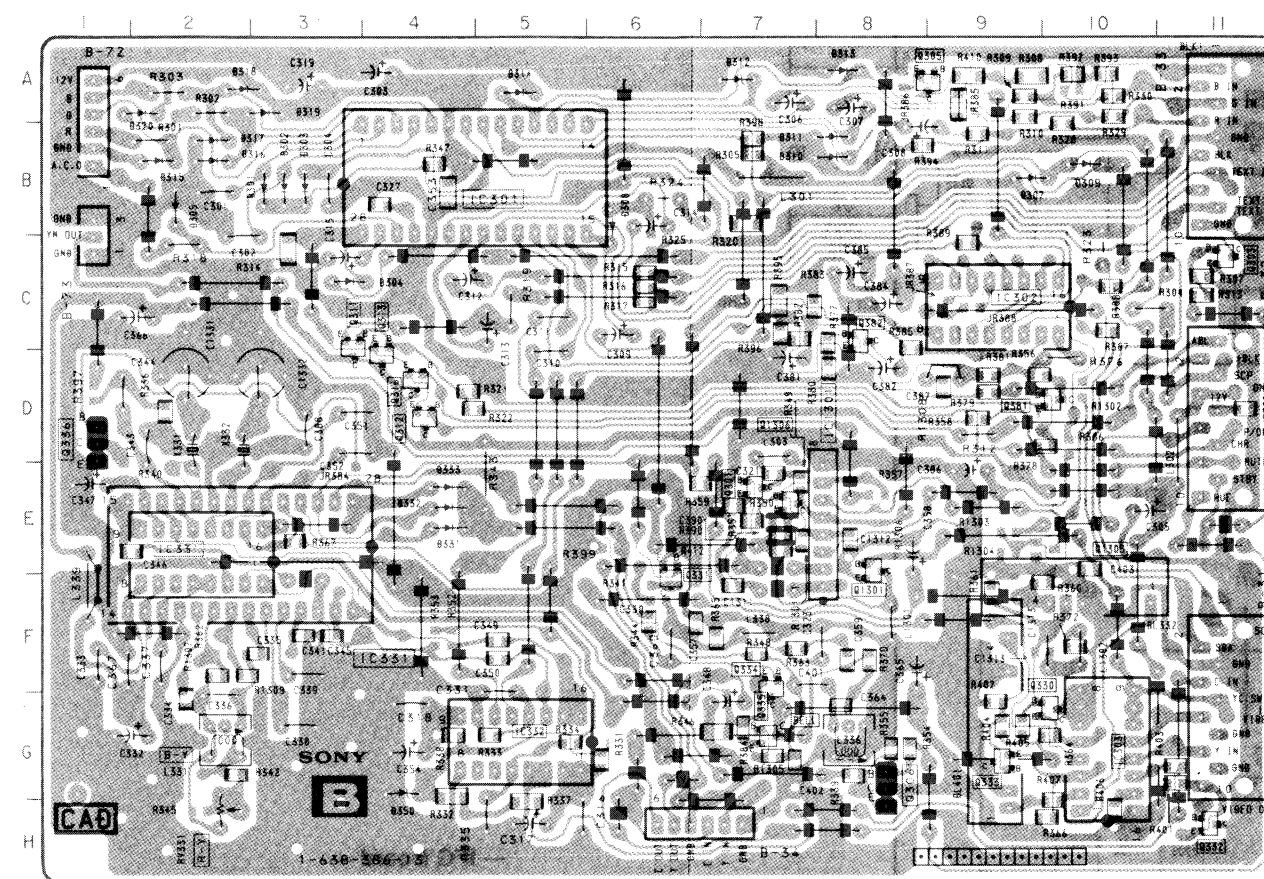


— V Board —

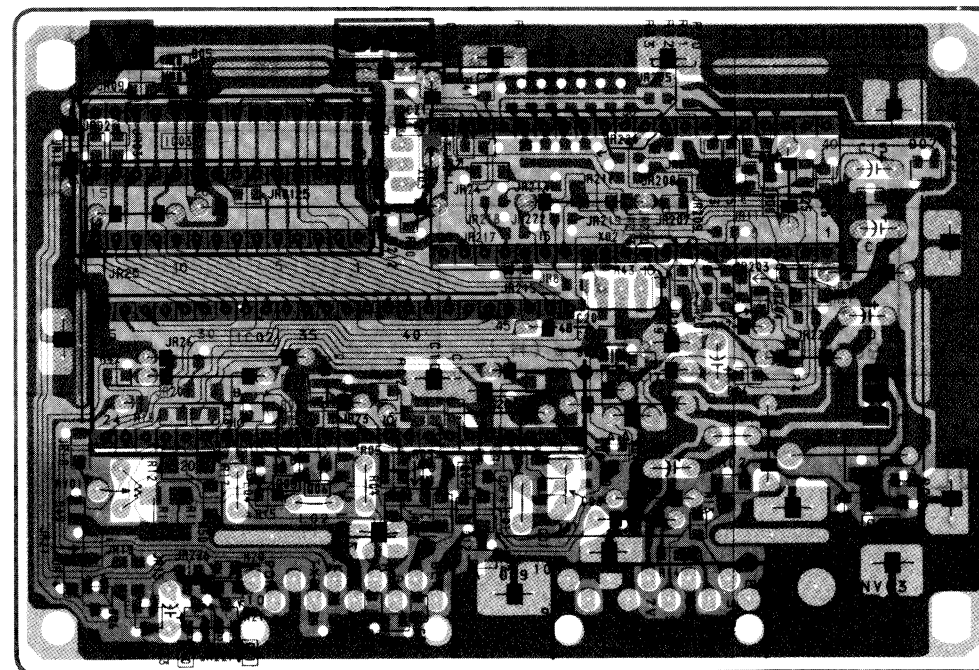




B-SS4073<AEP>-V



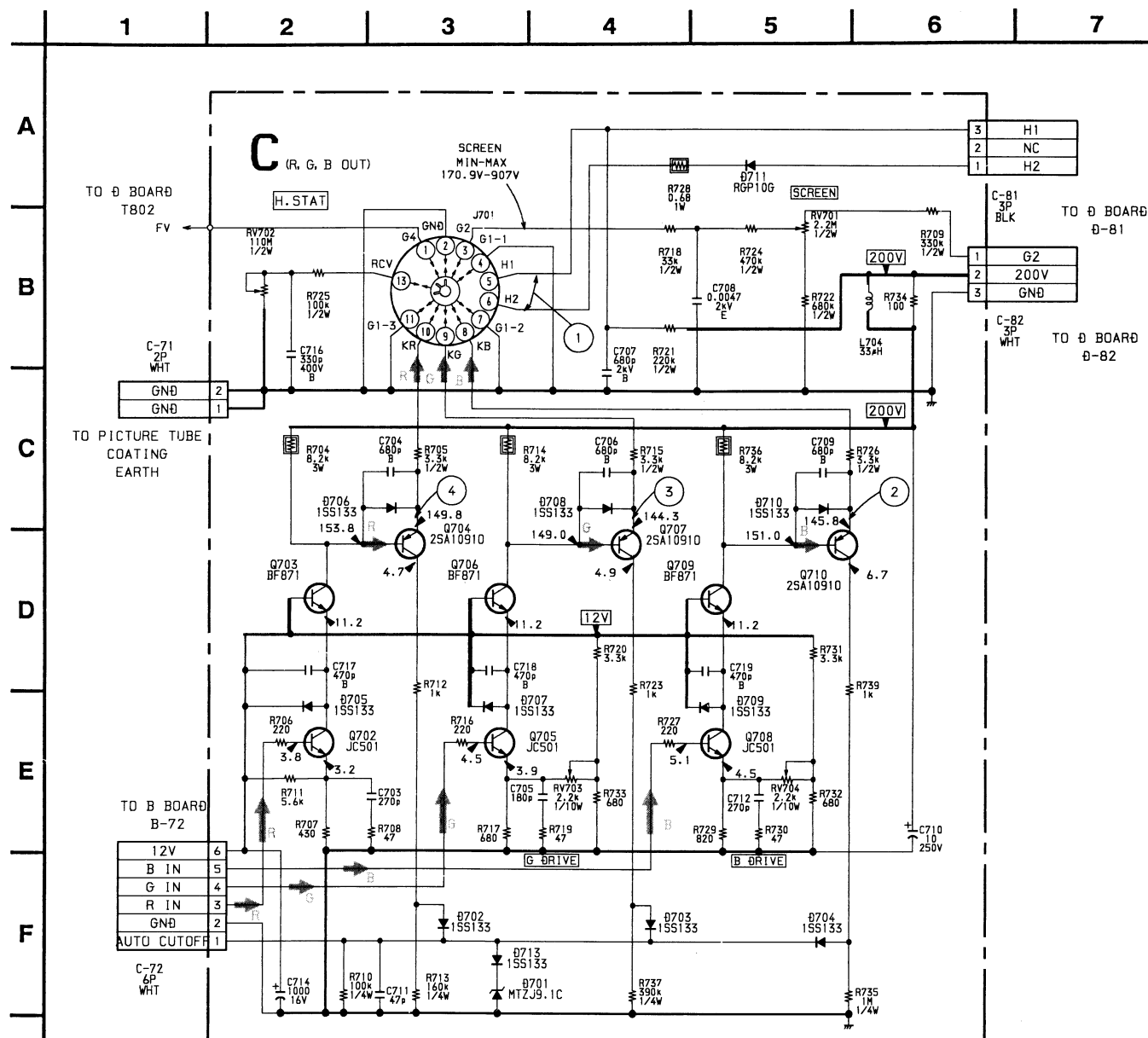
— V Board —



- : Conductor side pattern
- : Component side pattern

— B Board —

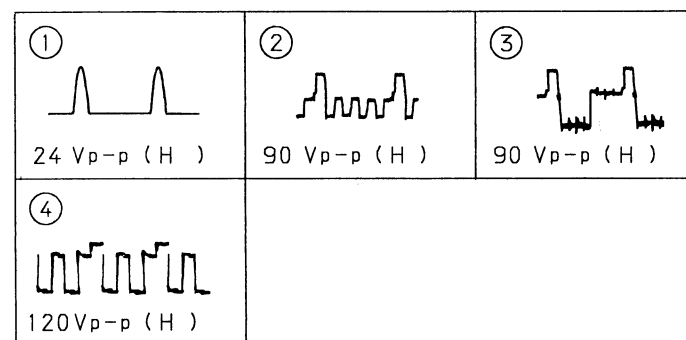
IC		D304	C - 3
		D305	B - 2
IC301	B - 5	D307	B - 9
IC302	C - 9	D309	B - 10
IC303	G - 10	D310	B - 8
IC331	E - 2	D311	B - 8
IC332	G - 5	D312	A - 7
		D313	A - 8
TRANSISTOR		D314	A - 5
		D315	B - 2
Q301	E - 7	D316	B - 2
Q303	C - 11	D317	B - 2
Q305	A - 9	D318	A - 2
Q306	G - 9	D319	A - 3
Q311	C - 3	D320	A - 2
Q312	D - 4	D331	E - 4
Q313	C - 4	D332	E - 4
Q316	D - 4	D333	E - 4
Q330	G - 10	D350	G - 4
Q331	F - 6	TRIMMER	
Q332	H - 11	CT331	D - 2
Q333	G - 9	CT332	D - 3
Q334	F - 7	VARIABLE RESISTOR	
Q335	G - 8		
Q381	D - 10	RV331	H - 2
Q382	C - 8		
Q1301	E - 8		
Q1306	E - 7		
DIODE			
D301	B - 3		
D302	B - 3		
D303	B - 3		



— C Board —

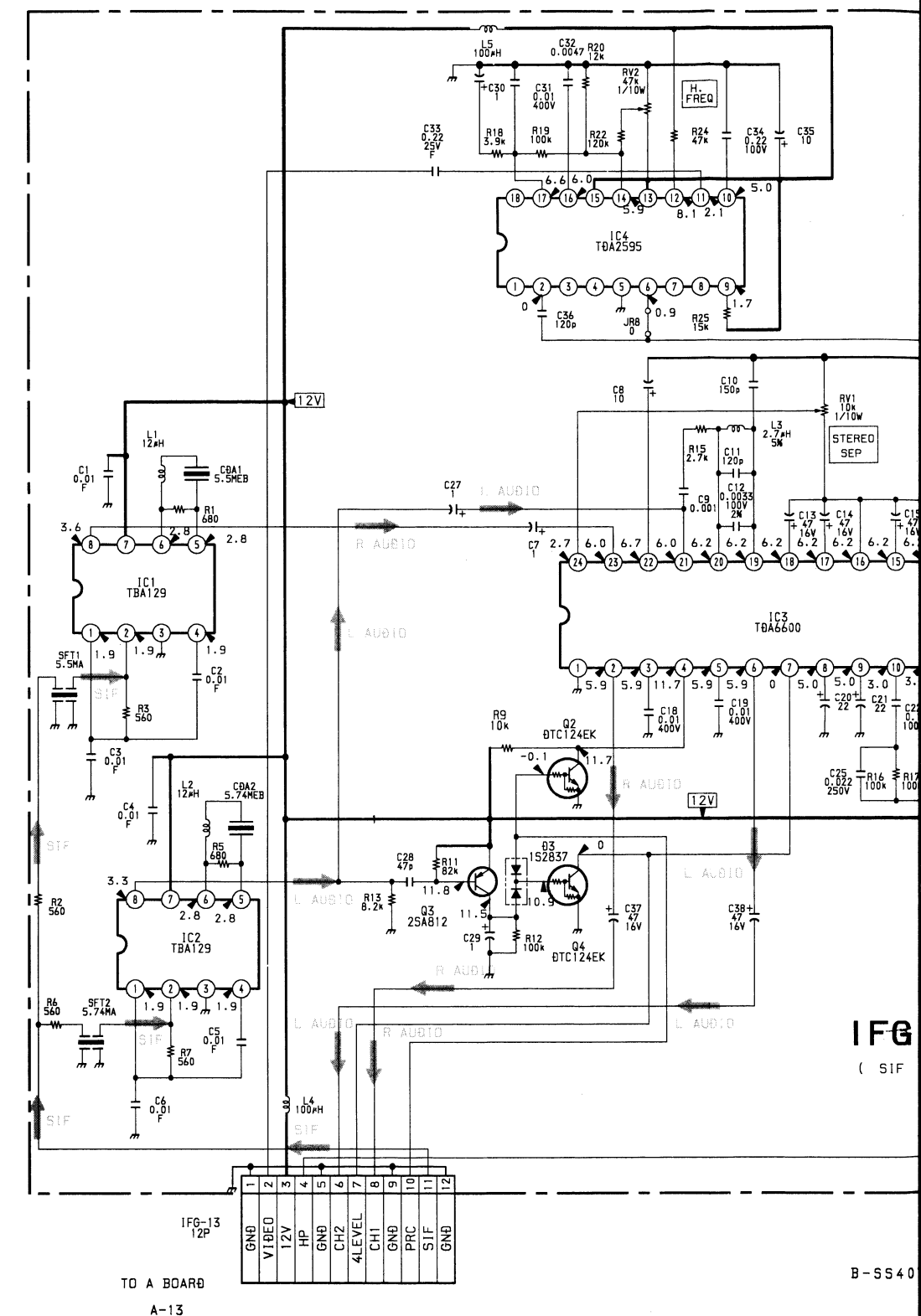
Q702	JC501	R ØRIVE
Q703	ØF871	R OUT
Q704	2SA10910	ACO MEASURING
Q705	JC501	G ØRIVE
Q706	BF871	G OUT
Q707	2SA10910	ACO MEASURING
Q708	JC501	B ØRIVE
Q709	BF871	B OUT
Q710	2SA10910	ACO MEASURING
Ø701	MTZJ9.1C	PROTECT
Ø702	1SS133	PROTECT
Ø703	1SS133	PROTECT
Ø704	1SS133	PROTECT
Ø705	1SS133	PROTECT
Ø706	1SS133	PROTECT
Ø707	1SS133	PROTECT
Ø708	1SS133	PROTECT
Ø709	1SS133	PROTECT
Ø710	1SS133	PROTECT
Ø711	RGP10G	HEATING VOLTAGE REC
Ø713	1SS133	PROTECT

— C Board —



— IFG Board —

IC1	TBA129	5.5 DET
IC2	TBA129	SIF DET AMP
IC3	TDA6600-2	H. FRWQ AMP
IC4	TDA2595/V9	
Q2	DTC124EK	SW
Q3	2SA812	SW
Q4	DTC124EK	SW
D3	1S2837	SW



H1
NC
H2

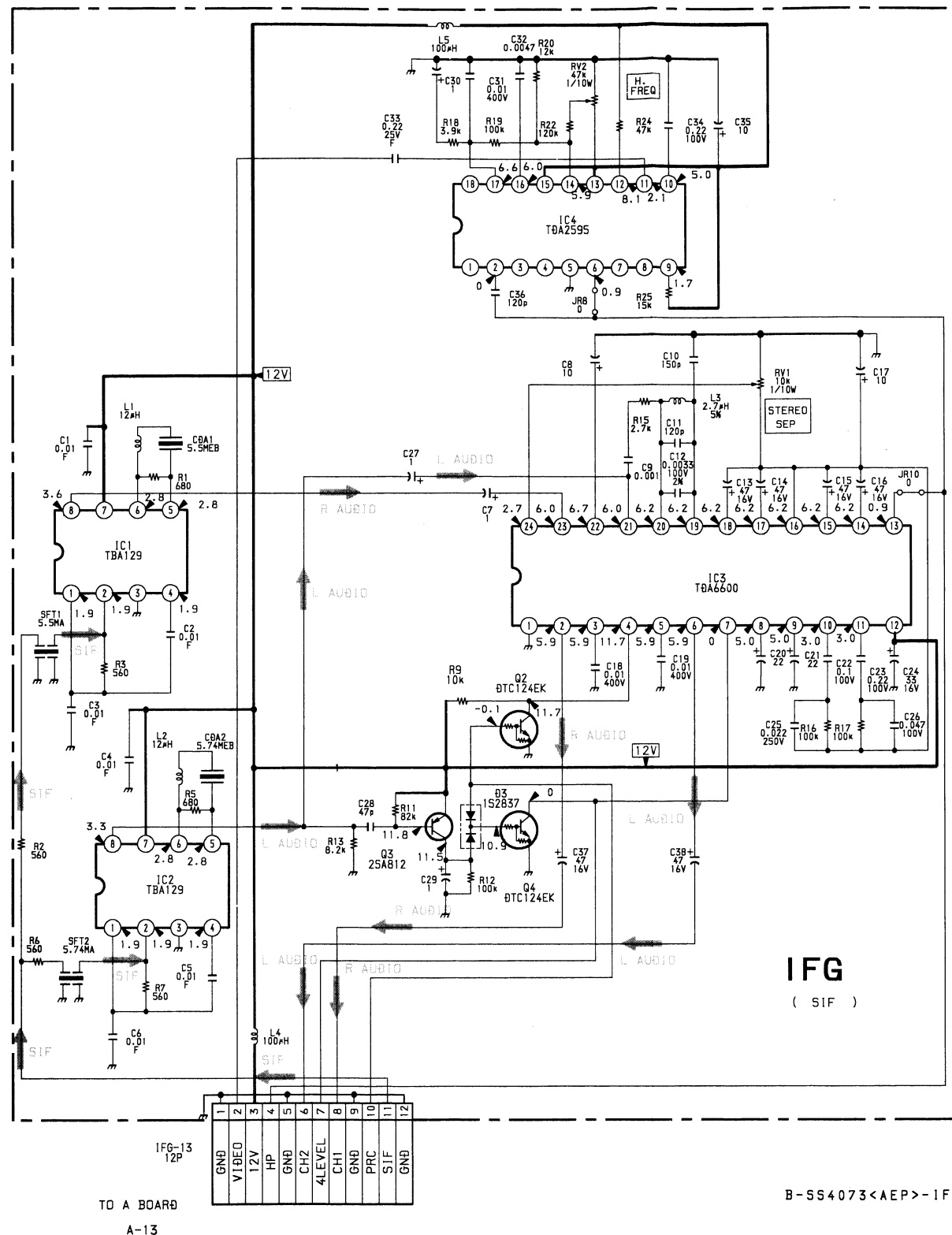
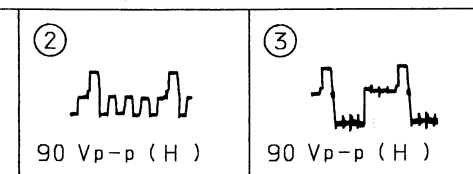
81
P
K
TO D BOARD
D-81

G2
200V
GND

82
P
K
TO D BOARD
D-82

— IFG Board —

IC1	TBA129	5.5 DET
IC2	TBA129	SIF DET AMP
IC3	TDA6600-2	H. FRWQ AMP
IC4	TDA2595/V9	
Q2	DTC124EK	SW
Q3	2SA812	SW
Q4	DTC124EK	SW
D3	1S2837	SW



MC-Service

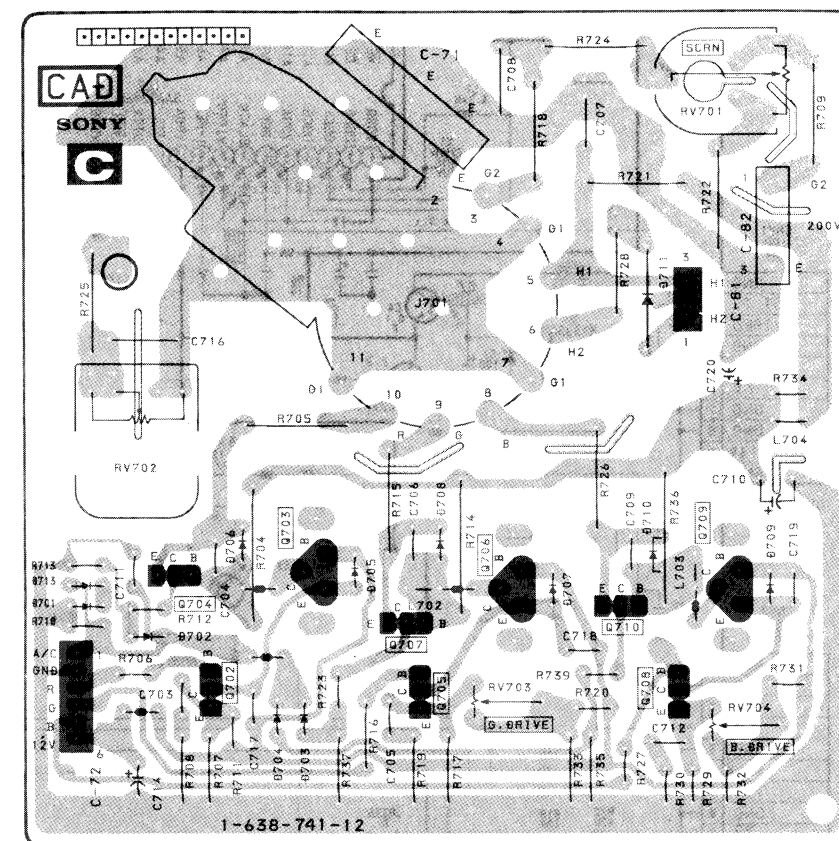
C

[R.G.B. OUT]

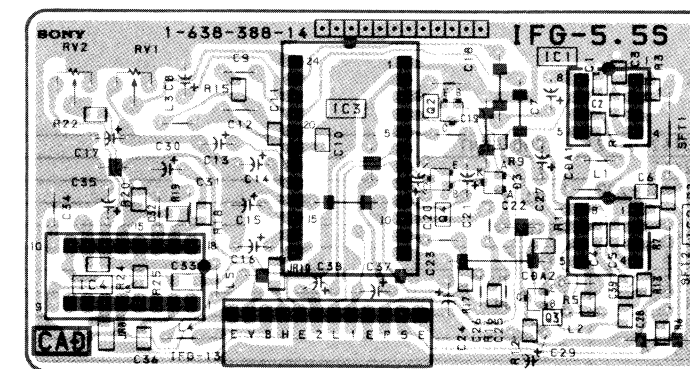
IFG

[SIF]

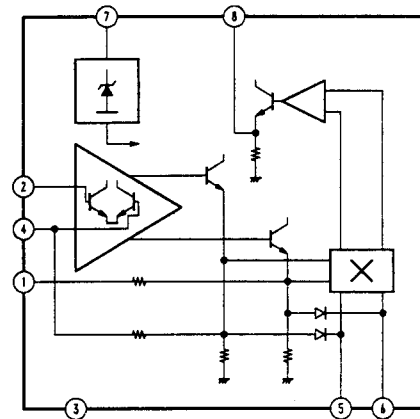
— C Board —



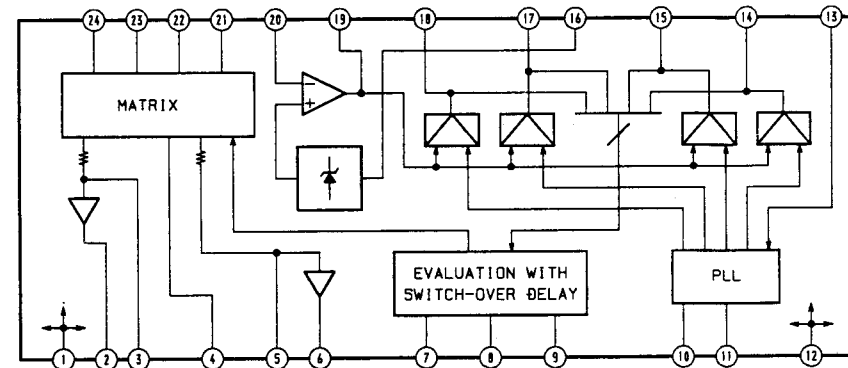
— IFG Board —



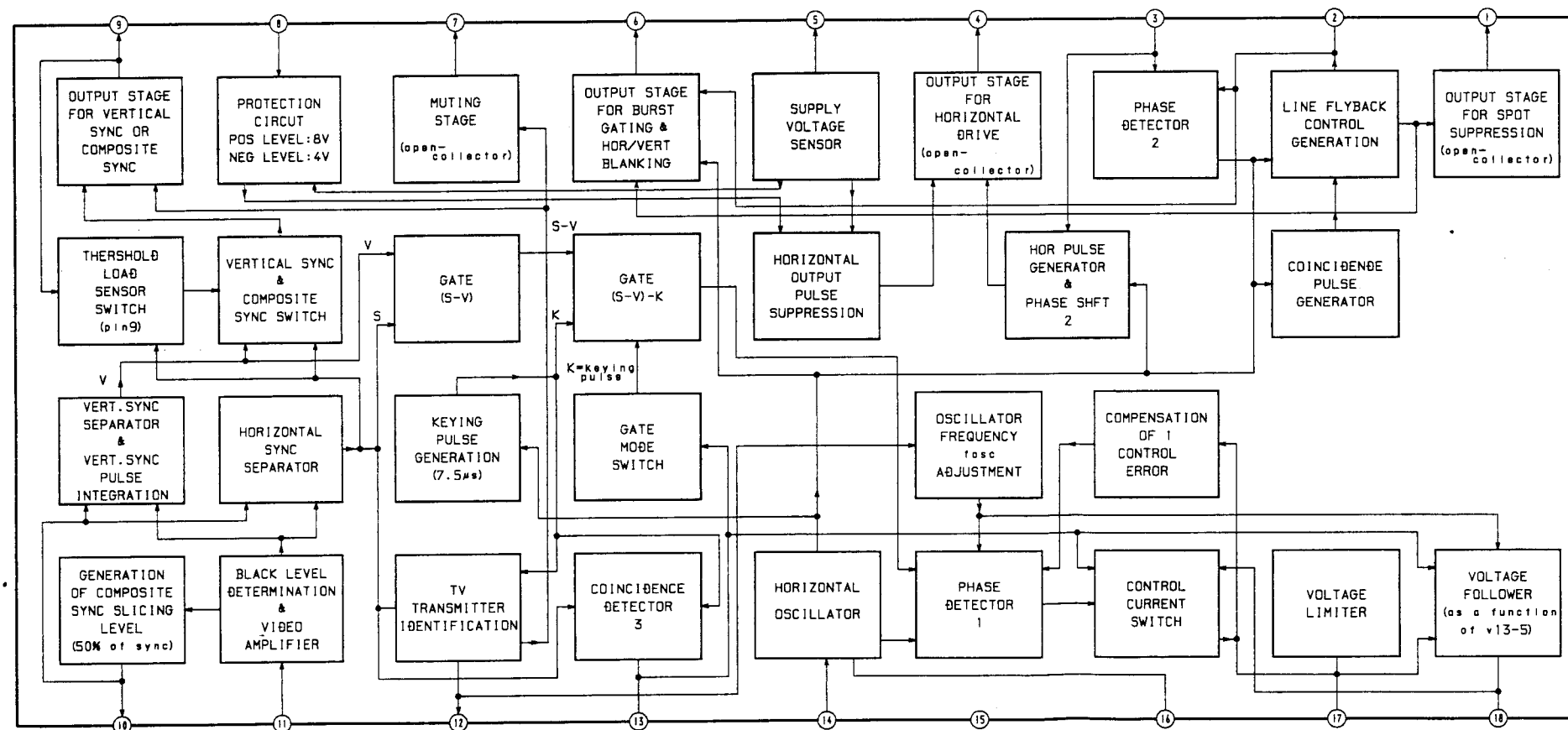
IFG BOARD IC1/IC2 TBA129



IFG BOARD IC3 TDA6600

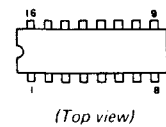


IFG BOARD IC4 TDA2595

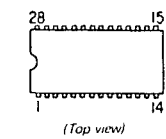


5-4. SEMICONDUCTORS

BU14053B
HD14053BFP
MC14051BCP
MC14053BCP
PCF8574
TDA2545A-V4
TDA4660V2
TDA8442-N3
TEA2260
μPD4053BC



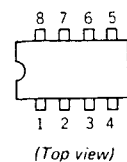
CXA1114P
CXK5864BP-10L
FCB61C65L-70P
TC5565APL-15L
TDA4580-V7
TDA4650
TDA4650/V4
TDA6200
TEA2028B



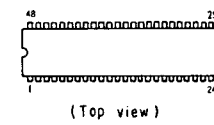
LM7812CT
TDA8341/N6
TEA7605



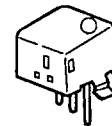
RC4558P
SDA2546
TBA129
TEA2014A
TEA2031A



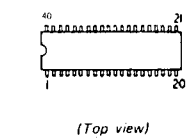
SAA5246P/E



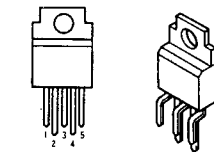
SBX1610-11



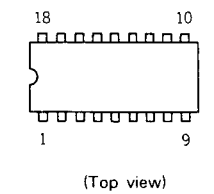
SDA20162-B002
SDA20560-A012



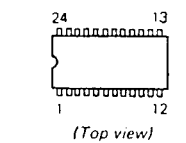
TDA2050



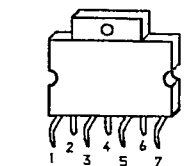
TDA2595/V9



TDA6600-2



TDA8170



BF871



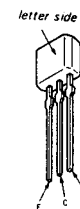
DTA144EK
DTC114EK
DTC124EK
DTC144EK
MMST2907A
2SA1162-G
2SA1623-L5L6
2SB1295-UL6
2SC1623-L5L6
2SA812
2SA1037K
2SC2412K



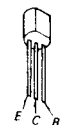
DTC144ES



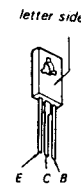
JC501TP-Q
2SC2785-HFE



2SA1091-0
2SA10910



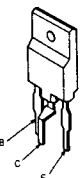
2SA1220A-P
2SB1357T114EF
2SC2688-LK



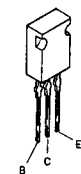
2SB734-34
2SD774-34



2SD1548-LB
2SD1941-06



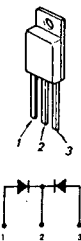
2SD2096-EF



2SD789-34



CTU-12S



DAN202K
1S2836



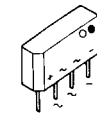
DAP202K



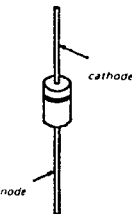
DA204K
1SS226



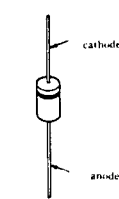
D4SB60L-F



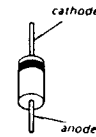
EGP20G



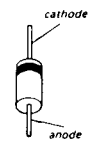
ERC06-15S
ERC25-06S
RGP10GPKG23
RU-3AM



ERD28-08S
GP08DPKG23
RGP02-17
RGP15J

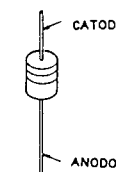


ERD29-08J

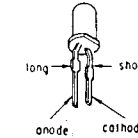


HZS10NB3
HZS11NB3
HZS13NB2
HZS15NB1
HZS33NB1
HZS36NB4
HZS3.9NB2
HZS4.7NB2
HZS5.6NB2
HZS5.6NB3
HZS6.2NB2
HZS6.8NB3
HZS7.5NB3
HZS9.1NB3

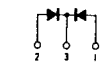
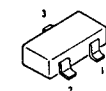
MTZJ-11C
MTZJ-13B
MTZJ-15A
MTZJ-33A
MTZJ-36D
MTZJ-3.9B
MTZJ-4.7B
MTZJ-5.6B
MTZJ-5.6C
MTZJ-6.2B
MTZJ-6.8C
MTZJ-7.5C
MTZJ-9.1C
MTZJ-10C
RD11ESB3
RD13ESB2
RD15ESB1
RD5.6ESB2
RD6.2ESB2
RD6.2ESL3
RD6.8ESB2
RD7.5ESB2
RD9.1ESB3
UZ-4.7BSC
1SS119
1SS133



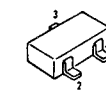
LD-201VR



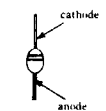
MA152WK
1S2837



MA3036H
MA3056M
MA3068M
RD3.6M-B2
RD5.6M-B2
RD6.8M-B2



U05G



SECTION 6 EXPLODED VIEWS

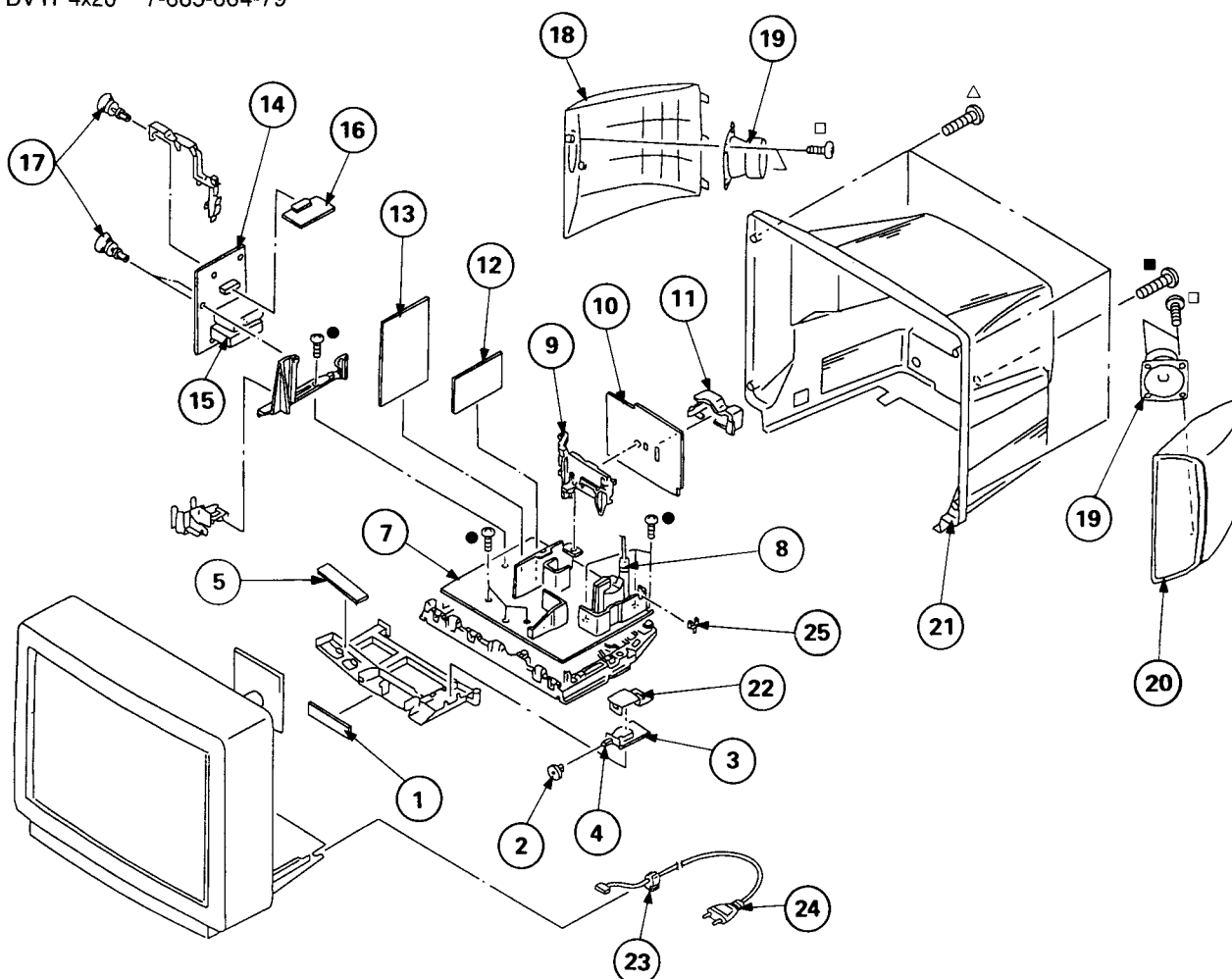
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **△** are critical for safety.
Replace only with part number specified.

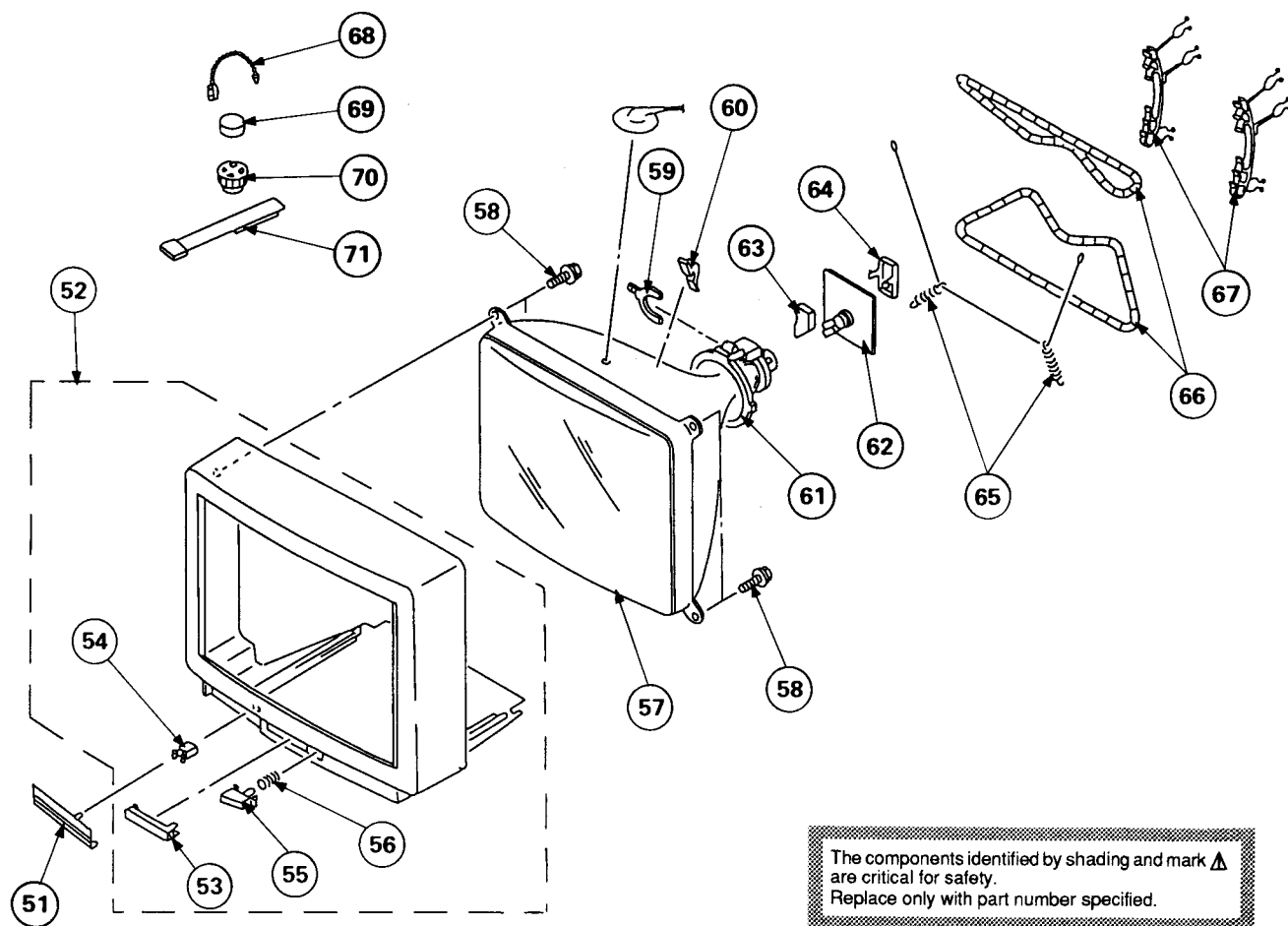
6-1. CHASSIS

- : BVTP3x12 7-685-648-79
- : BVTP4x16 7-685-663-79
- : BVTP3x20 7-685-651-79
- △ : BVTP4x20 7-685-664-79



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	*1-638-745-11	H2 BOARD		14	*A-1632-054-A	A BOARD, COMPLETE	
2	4-386-611-11	COVER, SWITCH		15	△.1-465-301-11	TUNER, ET (UV-816(PLL))	
3	*1-638-743-11	F BOARD		16	*A-1654-005-A	IFG BOARD, COMPLETE	
4	△.1-571-433-12	SWITCH, PUSH (AC POWER)		17	4-386-618-01	RIVET, T TYPE	
5	*1-638-744-11	H1 BOARD		18	X-4200-092-1	BAFFLE BOARD ASSY (L)	
7	*A-1642-067-A	D BOARD, COMPLETE		19	1-544-728-11	SPEAKER (7.5X13CM)	
8	△.1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)		20	X-4200-093-1	BAFFLE BOARD ASSY (R)	
9	*4-386-624-01	BRACKET, J		21	4-200-932-01	COVER, REAR	
10	*A-1651-023-A	J1 BOARD, COMPLETE		22	4-200-274-11	COVER, POWER SWITCH	
11	4-200-014-11	BRACKET, TERMINAL		23	△.4-389-201-03	HOLDER, AC CORD	
12	*A-1645-022-A	V BOARD, COMPLETE		24	△.1-590-501-11	CORD, POWER (WITH NOISE FILTER)	
13	*A-1621-036-A	B BOARD, COMPLETE		25	*3-646-071-00	HOLDER, WIRE	

6-2. PICTURE TUBE



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	4-200-939-01	DOOR (PAINTED)		62	*A-1638-018-A	C BOARD, COMPLETE	
52	X-4200-091-1	CABINET ASSY (WITH BEZEL ASSY)	53-56	63	*4-379-167-01	COVER (MAIN), CV	
53	4-200-148-01	WINDOW, ORNAMENTAL		64	*4-379-160-01	COVER (REAR LID), CV	
54	4-392-036-01	CATCHER, PUSH		65	4-200-433-11	SPRING, EXTENSION	
55	4-200-886-11	BUTTON, POWER		66	▲ 1-426-383-11	COIL, DEMAGNETIZATION	
56	4-329-112-00	SPRING		67	*4-386-622-11	BAND, DGC	
57	▲ 8-738-758-05	PICTURE TUBE (A51JXH61X)		68	4-308-870-00	CLIP, LEAD WIRE	
58	4-382-733-01	SCREW (S), PT		69	1-452-032-00	MAGNET, DISK; 10MM ϕ	
59	1-452-277-00	MAGNET, BMC		70	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
60	3-704-495-01	SPACER, DY		71	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
61	▲ 1-451-295-11	DEFLECTION YOKE (Y21PFA2)					

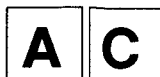
B

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D332	8-719-911-19	DIODE 1SS119		R313	1-216-081-00	METAL GLAZE 22K 5%	1/10W
D333	8-719-911-19	DIODE 1SS119		R314	1-216-182-00	METAL GLAZE 220 5%	1/8W
D350	8-719-109-89	DIODE RD5.6ES-B2					
<DELAY LINE>				R315	1-216-031-00	METAL GLAZE 180 5%	1/10W
DL332	1-236-062-11	MODULE, Y DELAY LINE		R316	1-216-031-00	METAL GLAZE 180 5%	1/10W
DL401	1-415-613-11	DELAY LINE, Y		R317	1-216-031-00	METAL GLAZE 180 5%	1/10W
<IC>				R318	1-249-429-11	CARBON 10K 5%	1/4W
IC301	8-759-517-43	IC TDA4580-V7		R319	1-249-409-11	CARBON 220 5%	1/4W
IC302	8-759-980-60	IC TDA8442N3		R320	1-216-198-00	METAL GLAZE 1K 5%	1/8W
IC303	8-759-140-53	IC UPD4053BC		R321	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
IC331	8-759-521-22	IC TDA4650/V4		R322	1-216-051-00	METAL GLAZE 1.2K 5%	1/10W
IC332	8-759-505-39	IC TDA4660V2		R328	1-216-311-00	METAL GLAZE 6.8 5%	1/10W
<COIL>				R329	1-216-311-00	METAL GLAZE 6.8 5%	1/10W
L301	1-410-868-11	INDUCTOR 4.7UH		R330	1-216-311-00	METAL GLAZE 6.8 5%	1/10W
L302	1-410-868-11	INDUCTOR 4.7UH		R331	1-216-001-00	METAL GLAZE 10 5%	1/10W
L303	1-408-406-00	INDUCTOR 5.6UH		R332	1-216-184-00	METAL GLAZE 270 5%	1/8W
L331	1-404-554-11	COIL		R333	1-216-121-00	METAL GLAZE 1M 5%	1/10W
L336	1-404-554-11	COIL		R334	1-216-073-00	METAL GLAZE 10K 5%	1/10W
L338	1-408-409-00	INDUCTOR 10UH		R335	1-247-852-11	CARBON 7.5K 5%	1/4W
L1301	1-408-425-00	INDUCTOR 220UH		R336	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
L1302	1-408-419-00	INDUCTOR 68UH		R337	1-216-184-00	METAL GLAZE 270 5%	1/8W
<TRANSISTOR>				R338	1-216-001-00	METAL GLAZE 10 5%	1/10W
Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R339	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R341	1-216-031-00	METAL GLAZE 180 5%	1/10W
Q305	8-729-901-06	TRANSISTOR DTA144EK		R342	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q306	8-729-119-78	TRANSISTOR 2SC2785-HFE		R344	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q311	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R346	1-216-202-00	METAL GLAZE 1.5K 5%	1/8W
Q312	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R347	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q313	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R348	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q316	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R349	1-216-045-00	METAL GLAZE 680 5%	1/10W
Q330	8-729-216-22	TRANSISTOR 2SA1162-G		R350	1-216-045-00	METAL GLAZE 680 5%	1/10W
Q331	8-729-901-00	TRANSISTOR DTC124EK		R351	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q332	8-729-216-22	TRANSISTOR 2SA1162-G		R354	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q333	8-729-216-22	TRANSISTOR 2SA1162-G		R355	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
Q334	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R356	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
Q335	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R358	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q381	8-729-901-00	TRANSISTOR DTC124EK		R359	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q382	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R360	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q1301	8-729-901-00	TRANSISTOR DTC124EK		R361	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
Q1306	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R363	1-216-055-00	METAL GLAZE 1.8K 5%	1/10W
<RESISTOR>				R364	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
JR385	1-216-206-00	METAL GLAZE 2.2K 5%	1/8W	R365	1-216-047-00	METAL GLAZE 820 5%	1/10W
JR390	1-216-295-00	METAL GLAZE 0 5%	1/10W	R366	1-216-059-00	METAL GLAZE 2.7K 5%	1/10W
R301	1-249-409-11	CARBON 220 5%	1/4W	R367	1-216-033-00	METAL GLAZE 220 5%	1/10W
R302	1-249-409-11	CARBON 220 5%	1/4W	R370	1-216-033-00	METAL GLAZE 220 5%	1/10W
R303	1-249-409-11	CARBON 220 5%	1/4W	R372	1-216-023-00	METAL GLAZE 82 5%	1/10W
R304	1-249-409-11	CARBON 220 5%	1/4W	R376	1-249-429-11	CARBON 10K 5%	1/4W
R305	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R377	1-216-037-00	METAL GLAZE 330 5%	1/10W
R307	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R378	1-216-097-00	METAL GLAZE 100K 5%	1/10W
R308	1-216-296-00	METAL GLAZE 0 5%	1/8W	R379	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R309	1-216-025-00	METAL GLAZE 100 5%	1/10W	R380	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R310	1-216-025-00	METAL GLAZE 100 5%	1/10W	R381	1-216-093-00	METAL GLAZE 68K 5%	1/10W
R311	1-216-025-00	METAL GLAZE 100 5%	1/10W	R382	1-216-107-00	METAL GLAZE 270K 5%	1/10W
R312	1-249-409-11	CARBON 220 5%	1/4W	R383	1-216-115-00	METAL GLAZE 560K 5%	1/10W
				R384	1-216-029-00	METAL GLAZE 150 5%	1/10W
				R385	1-216-085-00	METAL GLAZE 33K 5%	1/10W
				R387	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R388	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R389	1-216-101-00	METAL GLAZE 150K 5%	1/10W
				R390	1-216-033-00	METAL GLAZE 220 5%	1/10W
				R392	1-216-021-00	METAL GLAZE 68 5%	1/10W
				R393	1-216-021-00	METAL GLAZE 68 5%	1/10W
				R394	1-216-021-00	METAL GLAZE 68 5%	1/10W
				R395	1-216-214-00	METAL GLAZE 4.7K 5%	1/8W

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R396	1-216-041-00	METAL GLAZE 470 5% 1/10W		C109	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
R398	1-216-081-00	METAL GLAZE 22K 5% 1/10W		C111	1-124-925-11	ELECT 2.2MF 20% 50V	
R401	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W		C115	1-124-925-11	ELECT 2.2MF 20% 50V	
R402	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W		C127	1-124-122-11	ELECT 100MF 20% 50V	
R403	1-216-025-00	METAL GLAZE 100 5% 1/10W		C128	1-124-910-11	ELECT 47MF 20% 50V	
R404	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W		C129	1-124-910-11	ELECT 47MF 20% 50V	
R405	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		C138	1-136-165-00	FILM 0.1MF 5% 50V	
R406	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W		C171	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
R407	1-216-047-00	METAL GLAZE 820 5% 1/10W		C172	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
R410	1-216-184-00	METAL GLAZE 270 5% 1/8W		C177	1-102-074-00	CERAMIC 0.001MF 10% 50V	
R412	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W		C181	1-101-004-00	CERAMIC 0.01MF 50V	
R1301	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W					
R1305	1-216-001-00	METAL GLAZE 10 5% 1/10W			<IC>		
R1307	1-216-037-00	METAL GLAZE 330 5% 1/10W		IC103	8-759-979-62	IC PCF8574	
R1308	1-216-295-00	METAL GLAZE 0 5% 1/10W			<COIL>		
R1309	1-216-037-00	METAL GLAZE 330 5% 1/10W		L100	1-410-683-31	INDUCTOR 560UH	
		<VARIABLE RESISTOR>		L101	1-408-225-00	INDUCTOR 3.3UH	
RV331	1-238-012-11	RES, ADJ, CARBON 1K		L102	1-408-413-00	INDUCTOR 22UH	
		<CRYSTAL>		L107	1-408-397-00	INDUCTOR 1UH	
X331	1-567-307-11	OSCILLATOR, CRYSTAL			<TRANSISTOR>		
X332	1-567-131-00	OSCILLATOR, CRYSTAL		Q113	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
*****				Q114	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
*1-638-743-11	F BOARD	*****		Q115	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q116	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
*4-341-752-01	EYELET			Q125	8-729-900-89	TRANSISTOR DTC144ES	
		<CONNECTOR>		Q126	8-729-901-06	TRANSISTOR DTA144EK	
F61	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P		Q181	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
F62	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P			<RESISTOR>		
		<FUSE>		JR230	1-216-295-00	METAL GLAZE 0 5% 1/10W	
F1601Δ	1-576-231-21	FUSE (H.B.C.) 4A/250V		JR252	1-216-296-00	METAL GLAZE 0 5% 1/8W	
	1-533-230-11	HOLDER, FUSE; F1601		JR253	1-216-296-00	METAL GLAZE 0 5% 1/8W	
		<SWITCH>		JR255	1-216-296-00	METAL GLAZE 0 5% 1/8W	
S1701Δ	1-571-433-12	SWITCH, PUSH (AC POWER)		JR256	1-216-296-00	METAL GLAZE 0 5% 1/8W	
*****				JR257	1-216-296-00	METAL GLAZE 0 5% 1/8W	
*A-1632-054-A	A BOARD, COMPLETE	*****		JR258	1-216-296-00	METAL GLAZE 0 5% 1/8W	
		<CONNECTOR>		R101	1-216-025-00	METAL GLAZE 100 5% 1/10W	
A11	*1-565-393-11	CONNECTOR, BOARD TO BOARD		R105	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
A12	*1-565-393-11	CONNECTOR, BOARD TO BOARD		R107	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
A13	*1-565-503-11	CONNECTOR, BOARD TO BOARD 12P		R108	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
		<CAPACITOR>		R110	1-249-429-11	CARBON 10K 5% 1/4W	
C101	1-126-233-11	ELECT 22MF 20% 50V		R111	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C102	1-126-103-11	ELECT 470MF 20% 16V		R116	1-216-023-00	METAL GLAZE 82 5% 1/10W	
C104	1-124-910-11	ELECT 47MF 20% 50V		R118	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
C106	1-126-233-11	ELECT 22MF 20% 50V		R128	1-216-027-00	METAL GLAZE 120 5% 1/10W	
C108	1-136-165-00	FILM 0.1MF 5% 50V		R129	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
				R130	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
				R157	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				R158	1-249-409-11	CARBON 220 5% 1/4W	
				R159	1-249-409-11	CARBON 220 5% 1/4W	
				R161	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
				R162	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
				R163	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
				R164	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
				R165	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
				R167	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
				R168	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
				R169	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	



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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R181	1-216-049-00	METAL GLAZE 1K 5% 1/10W		J701	1-526-990-11	SOCKET, PICTURE TUBE	
R182	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W				<COIL>	
R193	1-216-073-00	METAL GLAZE 10K 5% 1/10W		L704	1-408-415-00	INDUCTOR 33UH	
R194	1-216-017-00	METAL GLAZE 47 5% 1/10W				<TRANSISTOR>	
R195	1-216-017-00	METAL GLAZE 47 5% 1/10W		Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
R196	1-216-113-00	METAL GLAZE 470K 5% 1/10W		Q703	8-729-906-70	TRANSISTOR BF871	
		<TUNER>		Q704	8-729-200-17	TRANSISTOR 2SA1091-0	
TU101	Δ1-465-301-11	TUNER, ET (UV-816(PLL))		Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		<IF BLOCK>		Q706	8-729-906-70	TRANSISTOR BF871	
VIF101	1-466-154-11	IF BLOCK (IFG-389S)		Q707	8-729-200-17	TRANSISTOR 2SA1091-0	
		*****		Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	*A-1638-018-A	C BOARD, COMPLETE		Q709	8-729-906-70	TRANSISTOR BF871	
		*****		Q710	8-729-200-17	TRANSISTOR 2SA1091-0	
	*4-379-160-01	COVER (REAR LID), CV				<RESISTOR>	
	*4-379-167-01	COVER (MAIN), CV		R704	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
		<CONNECTOR>		R705	1-202-824-00	SOLID 3.3K 10% 1/2W	
C71	*1-506-371-00	PIN, CONNECTOR 2P		R706	1-249-409-11	CARBON 220 5% 1/4W	
C72	*1-568-881-51	PIN, CONNECTOR 6P		R707	1-247-822-11	CARBON 430 5% 1/4W	
C81	*1-568-878-51	PIN, CONNECTOR 3P		R708	1-249-401-11	CARBON 47 5% 1/4W	
C82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		R709	1-202-844-00	SOLID 330K 10% 1/2W	
		<CAPACITOR>		R710	1-215-469-00	METAL 100K 1% 1/4W	
C703	1-102-980-00	CERAMIC 270PF 5% 50V		R711	1-249-426-11	CARBON 5.6K 5% 1/4W	
C704	1-102-116-00	CERAMIC 680PF 10% 50V		R712	1-249-417-11	CARBON 1K 5% 1/4W	
C705	1-102-976-00	CERAMIC 180PF 5% 50V		R713	1-215-474-00	METAL 160K 1% 1/4W	
C706	1-102-116-00	CERAMIC 680PF 10% 50V		R714	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
C707	1-162-116-00	CERAMIC 680PF 10% 2KV		R715	1-202-824-00	SOLID 3.3K 10% 1/2W	
C708	1-162-114-00	CERAMIC 0.0047MF 2KV		R716	1-249-409-11	CARBON 220 5% 1/4W	
C709	1-102-116-00	CERAMIC 680PF 10% 50V		R717	1-249-415-11	CARBON 680 5% 1/4W	
C710	1-123-947-00	ELECT 10MF 20% 250V		R718	1-202-814-11	SOLID 33K 10% 1/2W	
C711	1-101-880-00	CERAMIC 47PF 5% 50V		R719	1-249-401-11	CARBON 47 5% 1/4W	
C712	1-102-980-00	CERAMIC 270PF 5% 50V		R720	1-249-423-11	CARBON 3.3K 5% 1/4W	
C714	1-124-360-00	ELECT 1000MF 20% 16V		R721	1-202-842-11	SOLID 220K 10% 1/2W	
C716	1-162-622-11	CERAMIC 330PF 10% 400V		R722	1-202-848-00	SOLID 680K 10% 1/2W	
C717	1-102-114-00	CERAMIC 470PF 10% 50V		R723	1-249-417-11	CARBON 1K 5% 1/4W	
C718	1-102-114-00	CERAMIC 470PF 10% 50V		R724	1-202-846-00	SOLID 470K 10% 1/2W	
C719	1-102-114-00	CERAMIC 470PF 10% 50V		R725	1-202-838-00	SOLID 100K 10% 1/2W	
		<DIODE>		R726	1-202-824-00	SOLID 3.3K 10% 1/2W	
D701	8-719-110-14	DIODE RD9.1ES-B3		R727	1-249-409-11	CARBON 220 5% 1/4W	
D702	8-719-911-19	DIODE 1SS119		R728	1-216-347-11	METAL OXIDE 0.68 5% 1W F	
D703	8-719-911-19	DIODE 1SS119		R729	1-249-416-11	CARBON 820 5% 1/4W	
D704	8-719-911-19	DIODE 1SS119		R730	1-249-401-11	CARBON 47 5% 1/4W	
D705	8-719-911-19	DIODE 1SS119		R731	1-249-423-11	CARBON 3.3K 5% 1/4W	
D706	8-719-911-19	DIODE 1SS119		R732	1-249-415-11	CARBON 680 5% 1/4W	
D707	8-719-911-19	DIODE 1SS119		R733	1-249-415-11	CARBON 680 5% 1/4W	
D708	8-719-911-19	DIODE 1SS119		R734	1-249-405-11	CARBON 100 5% 1/4W	
D709	8-719-911-19	DIODE 1SS119		R735	1-215-493-00	METAL 1M 1% 1/4W	
D710	8-719-911-19	DIODE 1SS119		R736	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
D711	8-719-300-33	DIODE RU-3AM		R737	1-215-483-00	METAL 390K 1% 1/4W	
D713	8-719-911-19	DIODE 1SS119		R739	1-249-417-11	CARBON 1K 5% 1/4W	
		<JACK>				<VARIABLE RESISTOR>	
				RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M	
				RV702	1-230-619-11	RES, ADJ, METAL GLAZE 110M	
				RV703	1-237-749-11	RES, ADJ, CARBON 2200	
				RV704	1-237-749-11	RES, ADJ, CARBON 2200	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
*A-1642-067-A	D BOARD, COMPLETE	*****		C519	1-136-173-00	FILM 0.47MF	5% 50V
4-200-001-11	HOLDER, IC			C520	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
4-201-023-01	SPACER, INSULATING			C521	1-137-098-11	FILM 0.1MF	10% 100V
*4-341-751-01	EYELET			C522	1-124-122-11	ELECT 100MF	20% 50V
*4-341-752-01	EYELET			C523	1-108-680-11	MYLAR 0.001MF	10% 100V
*4-368-683-01	SPRING			C524	1-108-798-11	MYLAR 0.0033MF	5% 50V
<CAPACITOR>				C525	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C002	1-163-205-00	CERAMIC CHIP 0.001MF	5% 50V	C526	1-163-103-00	CERAMIC CHIP 27PF	5% 50V
C003	1-124-925-11	ELECT 2.2MF	20% 50V	C527	1-137-098-11	FILM 0.1MF	10% 100V
C004	1-124-120-11	ELECT 220MF	20% 16V	C531	1-124-190-00	ELECT 680MF	10% 25V
C005	1-124-903-11	ELECT 1MF	20% 50V	C532	1-124-122-11	ELECT 100MF	20% 50V
C008	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C533	1-137-096-11	FILM 0.068MF	10% 100V
C009	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C534	1-124-120-11	ELECT 220MF	20% 16V
C010	1-124-120-11	ELECT 220MF	20% 16V	C536	1-131-363-00	TANTALUM 4.7MF	10% 16V
C011	1-163-031-11	CERAMIC CHIP 0.01MF	50V	C537	1-124-903-11	ELECT 1MF	20% 50V
C013	1-137-098-11	FILM 0.1MF	10% 100V	C538	1-108-680-11	MYLAR 0.001MF	10% 100V
C014	1-137-098-11	FILM 0.1MF	10% 100V	C539	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
C015	1-124-902-00	ELECT 0.47MF	20% 50V	C540	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C016	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C592	1-124-122-11	ELECT 100MF	20% 50V
C017	1-137-098-11	FILM 0.1MF	10% 100V	C593	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
C018	1-163-127-00	CERAMIC CHIP 270PF	5% 50V	C601 Δ	1-161-964-61	CERAMIC 0.0047MF	250V
C019	1-137-094-11	FILM 0.047MF	10% 100V	C602 Δ	1-161-964-61	CERAMIC 0.0047MF	250V
C021	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C603 Δ	1-161-964-61	CERAMIC 0.0047MF	250V
C023	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C604 Δ	1-125-318-11	ELECT (BLOCK) 220MF	20% 400V
C024	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C605	1-124-484-11	ELECT 220MF	20% 35V
C027	1-124-910-11	ELECT 47MF	20% 50V	C606	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
C030	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C607	1-137-028-11	FILM 1MF	10% 63V
C031	1-163-081-00	CERAMIC CHIP 0.22MF	25V	C608	1-124-927-11	ELECT 4.7MF	20% 50V
C032	1-163-081-00	CERAMIC CHIP 0.22MF	25V	C611	1-124-910-11	ELECT 47MF	20% 50V
C033	1-163-181-00	CERAMIC CHIP 100PF	5% 50V	C612	1-108-680-11	MYLAR 0.001MF	10% 100V
C034	1-124-907-11	ELECT 10MF	20% 50V	C613	1-136-539-11	FILM 0.0022MF	3% 2KV
C251	1-124-903-11	ELECT 1MF	20% 50V	C614	1-102-030-00	CERAMIC 330PF	10% 500V
C252	1-126-233-11	ELECT 22MF	20% 50V	C615	1-128-142-11	ELECT 1500MF	20% 25V
C253	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C616	1-102-030-00	CERAMIC 330PF	10% 500V
C254	1-137-098-11	FILM 0.1MF	10% 100V	C617	1-124-122-11	ELECT 100MF	20% 50V
C255	1-124-636-00	ELECT 3300MF	20% 25V	C618	1-162-115-00	CERAMIC 330PF	10% 2KV
C261	1-124-903-11	ELECT 1MF	20% 50V	C619	1-128-320-11	ELECT 2200MF	20% 16V
C262	1-126-233-11	ELECT 22MF	20% 50V	C620	1-136-173-00	FILM 0.47MF	5% 50V
C263	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C621	1-124-347-00	ELECT 100MF	20% 160V
C264	1-137-098-11	FILM 0.1MF	10% 100V	C622	1-128-320-11	ELECT 2200MF	20% 16V
C265	1-124-564-11	ELECT 4700MF	20% 25V	C623	1-124-910-11	ELECT 47MF	20% 50V
C270	1-137-035-11	FILM 0.47MF	10% 100V	C624	1-124-122-11	ELECT 100MF	20% 50V
C274	1-137-035-11	FILM 0.47MF	10% 100V	C625	1-124-360-00	ELECT 1000MF	20% 16V
C501	1-124-927-11	ELECT 4.7MF	20% 50V	C626	1-124-907-11	ELECT 10MF	20% 50V
C502	1-124-927-11	ELECT 4.7MF	20% 50V	C627	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C503	1-137-049-11	FILM 0.015MF	10% 400V	C631	1-124-927-11	ELECT 4.7MF	20% 50V
C504	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	C632	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C505	1-108-794-11	MYLAR 0.0015MF	5% 50V	C633	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C506	1-137-102-11	FILM 0.022MF	10% 250V	C801	1-126-105-11	ELECT 1000MF	20% 35V
C507	1-137-033-11	FILM 0.33MF	10% 100V	C802	1-102-030-00	CERAMIC 330PF	10% 500V
C508	1-137-102-11	FILM 0.022MF	10% 250V	C804	1-123-948-00	ELECT 22MF	20% 250V
C509	1-137-098-11	FILM 0.1MF	10% 100V	C805	1-162-114-00	CERAMIC 0.0047MF	2KV
C510	1-161-959-00	CERAMIC 22PF	10% 500V	C806	1-137-098-11	FILM 0.1MF	10% 100V
C511	1-108-686-11	MYLAR 0.0033MF	10% 100V	C807	1-106-395-00	MYLAR 0.15MF	10% 200V
C512	1-137-098-11	FILM 0.1MF	10% 100V	C810	1-123-024-21	ELECT 33MF	160V
C513	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	C811	1-136-111-00	FILM 1MF	5% 200V
C514	1-137-028-11	FILM 1MF	10% 63V	C812	1-124-634-11	ELECT 1MF	20% 250V
C515	1-124-903-11	ELECT 1MF	20% 50V	C813	1-102-212-00	CERAMIC 820PF	10% 500V
C516	1-108-680-11	MYLAR 0.001MF	10% 100V	C814 Δ	1-161-731-51	CERAMIC 0.001MF	10% 2KV
C517	1-124-252-00	ELECT 0.33MF	20% 50V	C815	1-136-111-00	FILM 1MF	5% 200V
C518	1-124-902-00	ELECT 0.47MF	20% 50V	C817 Δ	1-136-549-11	FILM 0.0106MF	3% 1.4KV
				C818 Δ	1-129-721-51	FILM 0.039MF	10% 30V
				C819 Δ	1-161-731-51	CERAMIC 0.001MF	10% 2KV

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C820	1-137-046-11	FILM	0.0082MF 10% 400V	D601	Δ 8-719-510-63	DIODE D4SB60L-F	
C821	Δ 1-162-116-51	CERAMIC	680PF 10% 2KV	D602	8-719-300-33	DIODE RU-3AM	
C822	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	D603	8-719-911-55	DIODE U05G	
C823	1-137-043-11	FILM	0.0047MF 10% 400V	D604	8-719-911-55	DIODE U05G	
C824	1-102-212-00	CERAMIC	820PF 10% 500V	D605	8-719-911-55	DIODE U05G	
C825	1-137-102-11	FILM	0.022MF 10% 250V	D606	8-719-300-33	DIODE RU-3AM	
C1601	Δ 1-136-518-11	FILM	0.33MF 20% 300V	D607	8-719-300-33	DIODE RU-3AM	
C1602	Δ 1-136-519-11	FILM	0.47MF 20% 300V	D608	8-719-300-33	DIODE RU-3AM	
C1603	Δ 1-164-246-51	CERAMIC	0.0022MF 20% 400V	D609	8-719-929-71	DIODE HZS33NB1	
C1605	Δ 1-164-246-51	CERAMIC	0.0022MF 20% 400V	D610	8-719-300-59	DIODE CTU-12S	
C1607	Δ 1-161-964-61	CERAMIC	0.0047MF 250V	D611	8-719-900-26	DIODE ERD29-08J	
<FILTER>				D612	8-719-300-59	DIODE CTU-12S	
CF001	1-577-364-11	VIBRATOR, CERAMIC		D613	8-719-979-85	DIODE EGP20G	
CF501	1-567-888-11	OSCILLATOR, CERAMIC		D614	8-719-979-85	DIODE EGP20G	
<CONNECTOR>				D616	8-719-120-78	DIODE RD6.2ES-L3	
D1	*1-568-881-51	PIN, CONNECTOR 6P		D617	8-719-911-19	DIODE 1SS119	
D2	*1-568-882-51	PIN, CONNECTOR 7P		D618	8-719-109-89	DIODE RD5.6ES-B2	
D11	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D619	8-719-929-71	DIODE HZS33NB1	
D12	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D620	8-719-800-76	DIODE 1SS226	
D18	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)		D621	8-719-929-71	DIODE HZS33NB1	
D21	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D622	8-719-911-19	DIODE 1SS119	
D22	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D623	8-719-911-19	DIODE 1SS119	
D31	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D624	8-719-911-19	DIODE 1SS119	
D32	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D630	8-719-110-39	DIODE RD15ES-B1	
D33	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D801	8-719-300-33	DIODE RU-3AM	
D41	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)		D802	8-719-300-33	DIODE RU-3AM	
D44	*1-568-881-51	PIN, CONNECTOR 6P		D803	8-719-976-64	DIODE RGP02-17	
D45	*1-568-881-51	PIN, CONNECTOR 6P		D804	8-719-911-55	DIODE U05G	
D51	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)		D805	8-719-911-55	DIODE U05G	
D62	*1-565-395-11	PIN, CONNECTOR 3P		D806	8-719-945-80	DIODE ERC06-15S	
D65	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		D808	8-719-928-08	DIODE ERD28-08S	
D66	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		<IC>			
D82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		IC001	8-759-047-60	IC SDA20560-A012	
D83	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		IC002	8-759-000-47	IC MC14051BCP	
D84	*1-580-798-11	CONNECTOR PIN (DY) 6P		IC003	8-759-945-58	IC RC4558P	
D801	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		IC005	8-759-748-56	IC SDA2546	
<DIODE>				IC251	8-759-988-94	IC TDA2050	
D001	8-719-929-03	DIODE HZS6.8NB3					
D002	8-719-929-03	DIODE HZS6.8NB3		IC261	4-812-134-00	RIVET NYLON, 3.5; IC251	
D003	8-719-911-19	DIODE 1SS119					
D005	8-719-109-89	DIODE RD5.6ES-B2		IC501	8-759-970-73	IC TEA2028B	
D006	8-719-929-71	DIODE HZS33NB1		IC502	8-759-944-57	IC TDA8170	
D007	8-719-982-08	DIODE MTZJ-3.9B		IC601	8-759-988-95	IC TEA2260	
D009	8-719-109-89	DIODE RD5.6ES-B2		IC604	8-759-510-52	IC TEA7605	
D010	8-719-120-78	DIODE RD6.2ES-L3		IC608	8-759-929-62	IC LM7812CT	
D011	8-719-120-78	DIODE RD6.2ES-L3		<COIL>			
D012	8-719-911-19	DIODE 1SS119		L501	1-408-225-00	INDUCTOR 3.3UH	
D013	8-719-929-03	DIODE HZS6.8NB3		L601	1-420-872-00	COIL, AIR CORE	
D271	8-719-110-36	DIODE RD13ES-B2		L602	1-410-396-41	FERRITE BEAD INDUCTOR	
D272	8-719-911-19	DIODE 1SS119		L603	1-410-396-41	FERRITE BEAD INDUCTOR	
D501	8-719-911-19	DIODE 1SS119		L604	1-410-671-31	INDUCTOR 47UH	
D504	8-719-911-55	DIODE U05G		L605	1-459-585-11	COIL (WITH CORE) (DRUM TYPE)	
D506	8-719-800-76	DIODE 1SS226		L606	1-412-529-11	INDUCTOR 22UH	
D508	8-719-911-19	DIODE 1SS119		L607	1-410-671-31	INDUCTOR 47UH	
D511	8-719-911-55	DIODE U05G		L803	1-459-104-00	COIL, WITH CORE	
D512	8-719-911-55	DIODE U05G		L804	1-408-239-00	INDUCTOR 4.7MMH	
D513	8-719-928-85	DIODE HZS4.7NB2		L805	1-459-652-12	HLC	
				L806	1-459-115-00	COIL, DCC-H	
				L809	1-420-872-00	COIL, AIR CORE	
				L810	1-459-390-00	COIL (WITH CORE)	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
<TRANSFORMER>							
LF1601	Δ 1-421-866-12	LFT		R012	1-216-073-00	METAL GLAZE 10K 5%	1/10W
LF1602	Δ 1-421-776-21	LFT		R013	1-216-073-00	METAL GLAZE 10K 5%	1/10W
LF1603	Δ 1-421-862-11	LFT		R014	1-216-085-00	METAL GLAZE 33K 5%	1/10W
T601	Δ 1-450-038-11	S.R.T		R015	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
T602	Δ 1-424-277-11	TRANSFORMER, TRIGGER PULSE		R016	1-216-085-00	METAL GLAZE 33K 5%	1/10W
T801	1-437-090-00	HDT		R017	1-216-748-11	METAL GLAZE 39K 5%	1/10W
T802	Δ 1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)		R018	1-216-095-00	METAL GLAZE 82K 5%	1/10W
<IC LINK>				R019	1-216-025-00	METAL GLAZE 100 5%	1/10W
PS601	Δ 1-532-984-91	LINK, IC (ICP-N50) 2A		R020	1-216-025-00	METAL GLAZE 100 5%	1/10W
PS602	Δ 1-532-984-91	LINK, IC (ICP-N50) 2A		R021	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
PS603	Δ 1-532-679-91	LINK, IC (ICP-N15) 0.6A		R022	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
PS604	Δ 1-532-984-91	LINK, IC (ICP-N50) 2A		R024	1-216-073-00	METAL GLAZE 10K 5%	1/10W
<TRANSISTOR>				R025	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q001	8-729-901-01	TRANSISTOR DTC144EK		R026	1-216-182-00	METAL GLAZE 220 5%	1/8W
Q002	8-729-901-01	TRANSISTOR DTC144EK		R027	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q003	8-729-216-22	TRANSISTOR 2SA1162-G		R028	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q004	8-729-216-22	TRANSISTOR 2SA1162-G		R029	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q005	8-729-901-01	TRANSISTOR DTC144EK		R030	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q006	8-729-901-01	TRANSISTOR DTC144EK		R031	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q007	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R032	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q008	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R033	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q009	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R034	1-216-077-00	METAL GLAZE 15K 5%	1/10W
Q010	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R035	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q251	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R036	1-216-083-00	METAL GLAZE 27K 5%	1/10W
Q261	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R037	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
Q271	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R038	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
Q502	8-729-216-22	TRANSISTOR 2SA1162-G		R039	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q505	8-729-140-96	TRANSISTOR 2SD774-34		R040	1-216-077-00	METAL GLAZE 15K 5%	1/10W
Q506	8-729-140-97	TRANSISTOR 2SB734-34		R041	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q507	8-729-216-22	TRANSISTOR 2SA1162-G		R042	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q598	8-729-216-22	TRANSISTOR 2SA1162-G		R043	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q601	8-729-122-03	TRANSISTOR 2SA1220A-P		R044	1-216-097-00	METAL GLAZE 100K 5%	1/10W
Q602	8-729-209-02	TRANSISTOR 2SD1548-LB		R045	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
Q603	8-729-122-03	TRANSISTOR 2SA1220A-P		R046	1-216-095-00	METAL GLAZE 82K 5%	1/10W
Q604	8-729-216-22	TRANSISTOR 2SA1162-G		R047	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q605	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R048	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q606	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R049	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q607	8-729-920-92	TRANSISTOR 2SD2096-EF		R050	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
Q608	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R051	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q609	8-729-320-62	TRANSISTOR 2SD789-34		R052	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q801	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R053	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q804	8-729-304-50	TRANSISTOR 2SD1941-06		R054	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q805	8-729-119-80	TRANSISTOR 2SC2688-LK		R055	1-216-037-00	METAL GLAZE 330 5%	1/10W
<RESISTOR>				R056	1-216-073-00	METAL GLAZE 10K 5%	1/10W
JR1	1-216-296-00	METAL GLAZE 0 5%	1/8W	R057	1-216-025-00	METAL GLAZE 100 5%	1/10W
JR3	1-216-296-00	METAL GLAZE 0 5%	1/8W	R058	1-216-049-00	METAL GLAZE 1K 5%	1/10W
JR4	1-216-295-00	METAL GLAZE 0 5%	1/10W	R059	1-216-049-00	METAL GLAZE 1K 5%	1/10W
JR7	1-216-296-00	METAL GLAZE 0 5%	1/8W	R060	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R001	1-216-041-00	METAL GLAZE 470 5%	1/10W	R061	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R002	1-216-041-00	METAL GLAZE 470 5%	1/10W	R062	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R003	1-216-198-00	METAL GLAZE 1K 5%	1/8W	R063	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R004	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R064	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R005	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R065	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R006	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R066	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R007	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W	R067	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R008	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R068	1-216-174-00	METAL GLAZE 100 5%	1/8W
R009	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R069	1-216-174-00	METAL GLAZE 100 5%	1/8W
R010	1-216-041-00	METAL GLAZE 470 5%	1/10W	R070	1-216-198-00	METAL GLAZE 1K 5%	1/8W
				R071	1-216-198-00	METAL GLAZE 1K 5%	1/8W
				R072	1-216-222-00	METAL GLAZE 10K 5%	1/8W
				R073	1-216-073-00	METAL GLAZE 10K 5%	1/10W
				R075	1-216-041-00	METAL GLAZE 470 5%	1/10W
				R076	1-216-073-00	METAL GLAZE 10K 5%	1/10W

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R078	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R534	1-216-119-00	METAL GLAZE	820K 5% 1/10W
R079	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R535	1-249-753-15	CARBON	4.7M 5% 1/4W
R080	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R536	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R081	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R537	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R083	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R538	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R084	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R539	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R085	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R540	1-216-013-00	METAL GLAZE	33 5% 1/10W
R086	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R541	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R087	1-216-035-00	METAL GLAZE	270 5% 1/10W	R542	1-216-308-00	METAL GLAZE	4.7 5% 1/10W
R088	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R543	1-249-451-11	CARBON	2.2 5% 1/4W
R093	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R544	1-247-745-11	CARBON	330 5% 1/2W
R094	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R545	1-216-748-11	METAL GLAZE	39K 5% 1/10W
R095	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R546	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R096	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R547	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R098	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R548	1-216-350-11	METAL OXIDE	1.2 5% 1W
R251	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R549	1-215-890-11	METAL OXIDE	470 5% 2W
R252	1-216-039-00	METAL GLAZE	390 5% 1/10W	R550	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R253	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R551	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R254	1-216-357-00	METAL OXIDE	4.7 5% 1W	R552	1-216-433-00	METAL OXIDE	1.2K 5% 1W
R255	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R553	1-215-869-11	METAL OXIDE	1K 5% 1W
R256	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R554	1-216-037-00	METAL GLAZE	330 5% 1/10W
R257	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R555	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R258	1-215-869-11	METAL OXIDE	1K 5% 1W	R556	1-216-025-00	METAL GLAZE	100 5% 1/10W
R259	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R557	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R261	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R558	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R262	1-216-039-00	METAL GLAZE	390 5% 1/10W	R559	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R263	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R560	1-216-037-00	METAL GLAZE	330 5% 1/10W
R264	1-216-357-00	METAL OXIDE	4.7 5% 1W	R591	1-216-047-00	METAL GLAZE	820 5% 1/10W
R265	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R592	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R266	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R593	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R267	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R594	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R268	1-215-869-11	METAL OXIDE	1K 5% 1W	R597	1-216-041-00	METAL GLAZE	470 5% 1/10W
R269	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R598	1-215-900-11	METAL OXIDE	22K 5% 2W
R270	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R601	1-216-353-00	METAL OXIDE	2.2 5% 1W
R271	1-216-045-00	METAL GLAZE	680 5% 1/10W	R603	1-215-906-11	METAL OXIDE	15 5% 3W
R272	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R604	1-216-025-00	METAL GLAZE	100 5% 1/10W
R273	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R605	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R274	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R606	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R500	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R607	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R501	1-216-041-00	METAL GLAZE	470 5% 1/10W	R608	1-216-488-11	METAL OXIDE	18K 5% 3W
R502	1-216-033-00	METAL GLAZE	220 5% 1/10W	R609	1-216-007-00	METAL GLAZE	18 5% 1/10W
R503	1-216-035-00	METAL GLAZE	270 5% 1/10W	R610	1-244-941-00	CARBON	680K 5% 1/2W
R504	1-249-420-11	CARBON	1.8K 5% 1/4W	R611	1-216-015-00	METAL GLAZE	39 5% 1/10W
R505	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R612	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R506	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R613	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R509	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R614	1-205-758-11	WIREWOUND	100 10% 10W
R510	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R616	1-216-099-00	METAL GLAZE	120K 5% 1/10W
R514	1-216-033-00	METAL GLAZE	220 5% 1/10W	R617	1-216-037-00	METAL GLAZE	330 5% 1/10W
R515	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R618	1-216-431-11	METAL OXIDE	560 5% 1W
R517	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R619	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R518	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R620	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R519	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R621	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R520	1-216-037-00	METAL GLAZE	330 5% 1/10W	R622	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R521	1-216-025-00	METAL GLAZE	100 5% 1/10W	R623	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R522	1-215-469-00	METAL	100K 1% 1/4W	R624	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R523	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R625	1-215-865-11	METAL OXIDE	220 5% 1W
R524	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R626	1-216-037-00	METAL GLAZE	330 5% 1/10W
R525	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R628	1-216-001-00	METAL GLAZE	10 5% 1/10W
R526	1-249-409-11	CARBON	220 5% 1/4W	R629	1-216-037-00	METAL GLAZE	330 5% 1/10W
R527	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R631	1-216-465-11	METAL OXIDE	27K 5% 2W
R528	1-216-031-00	METAL GLAZE	180 5% 1/10W	R633	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R529	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R634	1-216-430-11	METAL OXIDE	390 5% 1W
R530	1-249-448-11	CARBON	1.2 5% 1/4W	R635	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R533	1-216-031-00	METAL GLAZE	180 5% 1/10W				

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

D V

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R636	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C14	1-124-927-11	ELECT 4.7MF	20% 50V
R643	1-217-190-21	WIREWOUND	0.15 5% 2W F	C15	1-124-927-11	ELECT 4.7MF	20% 50V
R651	1-216-025-00	METAL GLAZE	100 5% 1/10W	C16	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
R653	1-205-758-11	WIREWOUND	100 10% 10W F	C17	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
R802	1-249-443-11	CARBON	0.47 5% 1/4W F	C18	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
R805	1-249-448-11	CARBON	1.2 5% 1/4W F	C26	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R806	1-216-093-00	METAL GLAZE	68K 5% 1/10W	C27	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R807	1-215-869-11	METAL OXIDE	1K 5% 1W F	C28	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R809	1-202-821-11	SOLID	1.8K 10% 1/2W	C29	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R810	1-202-818-00	SOLID	1K 10% 1/2W	C32	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R811	1-215-863-11	METAL OXIDE	100 5% 1W	C33	1-163-038-00	CERAMIC CHIP 0.1MF	25V
R812	1-247-285-00	CARBON	75K 5% 1/2W				
R815	1-215-884-11	METAL OXIDE	47 5% 2W F				
R816	1-215-868-00	METAL OXIDE	680 5% 1W F				
R817	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R820	1-249-403-11	CARBON	68 5% 1/4W				
R821	1-247-725-11	CARBON	10K 5% 1/4W F				
R822	1-217-778-11	FUSIBLE	1K 5% 1W F				
R825	1-216-349-00	METAL OXIDE	1 5% 1W F				
R826	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
R827	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R828	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R829	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W				
R831	1-249-451-11	CARBON	2.2 5% 1/4W				
R1601 Δ	1-246-513-75	CARBON	47K 5% 1/4W				
R1602 Δ	1-244-945-91	CARBON	1M 5% 1/2W				
R1603 Δ	1-217-328-11	WIREWOUND	2.7 10% 7W F				
R1604 Δ	1-246-513-75	CARBON	47K 5% 1/4W				
R1605 Δ	1-218-265-91	METAL GLAZE	8.2M 5% 1W				
R5501	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R5503	1-216-308-00	METAL GLAZE	4.7 5% 1/10W				
R5504	1-216-121-00	METAL GLAZE	1M 5% 1/10W				
R5505	1-216-001-00	METAL GLAZE	10 5% 1/10W				
<VARIABLE RESISTOR>							
RV501	1-238-013-11	RES, ADJ, CARBON 2.2K					
RV502	1-238-016-11	RES, ADJ, CARBON 10K					
RV601	1-238-011-11	RES, ADJ, CARBON 470					
<SPARK GAP>							
SG801	1-519-422-11	GAP, SPARK					
<THERMISTOR>							
THP601 Δ	1-808-059-32	THERMISTOR, POSITIVE					

*A-1645-022-A V BOARD, COMPLETE							

<CAPACITOR>							
C1	1-126-101-11	ELECT 100MF	20% 16V				
C2	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C3	1-124-120-11	ELECT 220MF	20% 16V				
C4	1-163-077-00	CERAMIC CHIP 0.1MF	50V				
C5	1-124-120-11	ELECT 220MF	20% 16V				
C6	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C10	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C11	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C12	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
C13	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
<CONNECTOR>							
CNV1	*1-565-393-11	CONNECTOR, BOARD TO BOARD					
CNV2	*1-565-393-11	CONNECTOR, BOARD TO BOARD					
<DIODE>							
D1	8-719-105-91	DIODE RD5.6M-B2					
D3	8-719-104-34	DIODE 1S2836					
D4	8-719-400-18	DIODE MA152WK					
D5	8-719-104-34	DIODE 1S2836					
D6	8-719-400-18	DIODE MA152WK					
D7	8-719-105-52	DIODE RD3.6M-B2					
D9	8-719-106-17	DIODE RD6.8M-B2					
<IC>							
IC1	8-759-039-18	IC SDA20162-B002					
IC2	8-759-045-54	IC SAA5246P/E/M4A					
IC3	8-759-510-49	IC FCB61C65L-70P					
<COIL>							
L1	1-408-403-00	INDUCTOR 3.3UH					
L2	1-408-407-00	INDUCTOR 6.8UH					
L3	1-408-407-00	INDUCTOR 6.8UH					
L4	1-408-407-00	INDUCTOR 6.8UH					
<IC LINK>							
PS1	Δ 1-532-679-91	LINK, IC (ICP-N15) 0.6A					
<TRANSISTOR>							
Q1	8-729-900-53	TRANSISTOR DTC114EK					
Q2	8-729-920-92	TRANSISTOR 2SD2096-EF					
Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
Q5	8-729-807-87	TRANSISTOR 2SB1295-UL6					
Q6	8-729-807-87	TRANSISTOR 2SB1295-UL6					
Q7	8-729-807-87	TRANSISTOR 2SB1295-UL6					
Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6					
<RESISTOR>							
JR01	1-216-295-00	METAL GLAZE 0	5% 1/10W				
JR02	1-216-295-00	METAL GLAZE 0	5% 1/10W				
JR03	1-216-295-00	METAL GLAZE 0	5% 1/10W				
JR08	1-216-295-00	METAL GLAZE 0	5% 1/10W				
JR09	1-216-295-00	METAL GLAZE 0	5% 1/10W				
JR11	1-216-295-00	METAL GLAZE 0	5% 1/10W				

V H1 H2

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
JR14	1-216-296-00	METAL GLAZE	0 5% 1/8W	X1	1-579-266-31	CRYSTAL VIBRATOR	
JR17	1-216-295-00	METAL GLAZE	0 5% 1/10W	X2	1-577-364-11	VIBRATOR, CERAMIC	
JR18	1-216-296-00	METAL GLAZE	0 5% 1/8W	*****			
JR19	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR20	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR21	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR23	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR24	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR25	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR26	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR201	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR204	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR207	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR208	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR211	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR213	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR219	1-216-296-00	METAL GLAZE	0 5% 1/8W				
JR220	1-216-295-00	METAL GLAZE	0 5% 1/10W				
JR223	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R1	1-218-326-11	METAL GLAZE	470 5% 1/2W				
R3	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R4	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R5	1-216-047-00	METAL GLAZE	820 5% 1/10W				
R6	1-216-001-00	METAL GLAZE	10 5% 1/10W				
R7	1-216-083-00	METAL GLAZE	27K 5% 1/10W				
R8	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W				
R9	1-216-308-00	METAL GLAZE	4.7 5% 1/10W				
R02	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W				
R10	1-218-325-11	METAL GLAZE	120 5% 1/4W				
R11	1-218-325-11	METAL GLAZE	120 5% 1/4W				
R12	1-218-325-11	METAL GLAZE	120 5% 1/4W				
R13	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R14	1-216-001-00	METAL GLAZE	10 5% 1/10W				
R15	1-216-013-00	METAL GLAZE	33 5% 1/10W				
R16	1-216-013-00	METAL GLAZE	33 5% 1/10W				
R17	1-216-013-00	METAL GLAZE	33 5% 1/10W				
R18	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R19	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R20	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R21	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R22	1-216-168-00	METAL GLAZE	56 5% 1/8W				
R23	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W				
R24	1-216-055-00	METAL GLAZE	1.8K 5% 1/10W				
R25	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R26	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R27	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W				
R28	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W				
R34	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R35	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R40	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R41	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R42	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R44	1-216-295-00	METAL GLAZE	0 5% 1/10W				
R46	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R47	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R49	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R50	1-216-296-00	METAL GLAZE	0 5% 1/8W				
<VARIABLE RESISTOR>							
RV1	1-238-012-11	RES, ADJ, CARBON 1K					
<CRYSTAL>							

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
*A-1651-023-A J1 BOARD, COMPLETE *****				C1429	1-163-029-11	CERAMIC CHIP 0.0047MF	50V
<CAPACITOR>				C1430	1-163-003-11	CERAMIC CHIP 330PF	10% 50V
C203	1-124-925-11	ELECT	2.2MF 20% 50V	C1431	1-126-529-11	ELECT 0.47MF	20% 50V
C205	1-124-927-11	ELECT	4.7MF 20% 50V	C1432	1-124-902-00	ELECT 0.47MF	20% 50V
C206	1-124-925-11	ELECT	2.2MF 20% 50V	C1433	1-124-122-11	ELECT 100MF	20% 50V
C207	1-124-927-11	ELECT	4.7MF 20% 50V	C1436	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C213	1-126-233-11	ELECT	22MF 20% 50V	C1437	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C214	1-137-045-11	FILM	0.0068MF 10% 400V	C1438	1-137-047-11	FILM 0.01MF	10% 400V
C217	1-137-045-11	FILM	0.0068MF 10% 400V	C1439	1-137-047-11	FILM 0.01MF	10% 400V
C218	1-137-102-11	FILM	0.022MF 10% 250V	C1440	1-124-907-11	ELECT 10MF	20% 50V
C219	1-137-102-11	FILM	0.022MF 10% 250V	C1441	1-124-907-11	ELECT 10MF	20% 50V
C220	1-108-686-11	MYLAR	0.0033MF 10% 100V	C1442	1-137-098-11	FILM 0.1MF	10% 100V
C221	1-108-686-11	MYLAR	0.0033MF 10% 100V	C1443	1-137-098-11	FILM 0.1MF	10% 100V
C222	1-137-095-11	FILM	0.056MF 10% 100V	C1444	1-124-910-11	ELECT 47MF	20% 50V
C223	1-137-095-11	FILM	0.056MF 10% 100V	C1445	1-102-824-00	CERAMIC 470PF	5% 50V
C224	1-137-047-11	FILM	0.01MF 10% 400V	C1446	1-102-824-00	CERAMIC 470PF	5% 50V
C225	1-136-173-00	FILM	0.47MF 5% 50V	C1501	1-124-927-11	ELECT 4.7MF	20% 50V
C226	1-136-173-00	FILM	0.47MF 5% 50V	C1502	1-124-903-11	ELECT 1MF	20% 50V
C227	1-137-102-11	FILM	0.022MF 10% 250V	C1503	1-108-680-11	MYLAR 0.001MF	10% 100V
C228	1-137-104-11	FILM	0.033MF 10% 250V	C1504	1-124-910-11	ELECT 47MF	20% 50V
C229	1-137-049-11	FILM	0.015MF 10% 400V	C1505	1-137-094-11	FILM 0.047MF	10% 100V
C230	1-137-049-11	FILM	0.015MF 10% 400V	C1507	1-108-686-11	MYLAR 0.0033MF	10% 100V
C231	1-124-902-00	ELECT	0.47MF 20% 50V	C1508	1-124-903-11	ELECT 1MF	20% 50V
C232	1-124-907-11	ELECT	10MF 20% 50V	C1509	1-124-903-11	ELECT 1MF	20% 50V
C233	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	C1511	1-124-927-11	ELECT 4.7MF	20% 50V
C234	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	C1512	1-137-045-11	FILM 0.0068MF	10% 400V
C235	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	C1513	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
C236	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	C1514	1-137-102-11	FILM 0.022MF	10% 250V
C237	1-124-902-00	ELECT	0.47MF 20% 50V	C1515	1-102-117-00	CERAMIC 820PF	10% 50V
C238	1-163-125-00	CERAMIC CHIP	220PF 5% 50V	<CONNECTOR>			
C239	1-126-103-11	ELECT	470MF 20% 16V	CN1401	1-565-838-11	JACK BLOCK, PIN 2P	
C240	1-163-018-00	CERAMIC CHIP	0.0056MF 10% 50V	J1-41	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
C241	1-163-018-00	CERAMIC CHIP	0.0056MF 10% 50V	J1-43	*1-564-524-11	PLUG, CONNECTOR 9P	
C242	1-163-033-00	CERAMIC CHIP	0.022MF 50V	J1-44	*1-564-527-11	PLUG, CONNECTOR 12P	
C243	1-163-033-00	CERAMIC CHIP	0.022MF 50V	J1-51	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
C244	1-163-033-00	CERAMIC CHIP	0.022MF 50V	<DIODE>			
C245	1-163-033-00	CERAMIC CHIP	0.022MF 50V	D201	8-719-110-14	DIODE RD9.1ES-B3	
C1401	1-124-907-11	ELECT	10MF 20% 50V	D202	8-719-110-14	DIODE RD9.1ES-B3	
C1402	1-126-103-11	ELECT	470MF 20% 16V	D205	8-719-110-03	DIODE RD7.5ES-B2	
C1403	1-163-003-11	CERAMIC CHIP	330PF 10% 50V	D206	8-719-110-03	DIODE RD7.5ES-B2	
C1404	1-137-098-11	FILM	0.1MF 10% 100V	D1401	8-719-110-03	DIODE RD7.5ES-B2	
C1405	1-163-029-11	CERAMIC CHIP	0.0047MF 50V	D1403	8-719-110-03	DIODE RD7.5ES-B2	
C1406	1-137-098-11	FILM	0.1MF 10% 100V	D1404	8-719-110-03	DIODE RD7.5ES-B2	
C1407	1-124-910-11	ELECT	47MF 20% 50V	D1405	8-719-110-03	DIODE RD7.5ES-B2	
C1408	1-124-122-11	ELECT	100MF 20% 50V	D1406	8-719-110-03	DIODE RD7.5ES-B2	
C1409	1-126-233-11	ELECT	22MF 20% 50V	D1407	8-719-921-77	DIODE MTZN-10C	
C1410	1-124-907-11	ELECT	10MF 20% 50V	D1408	8-719-110-14	DIODE RD9.1ES-B3	
C1411	1-124-907-11	ELECT	10MF 20% 50V	D1409	8-719-110-14	DIODE RD9.1ES-B3	
C1412	1-124-910-11	ELECT	47MF 20% 50V	D1410	8-719-110-14	DIODE RD9.1ES-B3	
C1413	1-124-910-11	ELECT	47MF 20% 50V	D1415	8-719-110-03	DIODE RD7.5ES-B2	
C1414	1-124-907-11	ELECT	10MF 20% 50V	D1418	8-719-110-03	DIODE RD7.5ES-B2	
C1415	1-137-098-11	FILM	0.1MF 10% 100V	D1419	8-719-110-03	DIODE RD7.5ES-B2	
C1416	1-137-098-11	FILM	0.1MF 10% 100V	D1420	8-719-110-03	DIODE RD7.5ES-B2	
C1417	1-124-120-11	ELECT	220MF 20% 16V	D1421	8-719-110-03	DIODE RD7.5ES-B2	
C1418	1-163-003-11	CERAMIC CHIP	330PF 10% 50V	D1422	8-719-110-03	DIODE RD7.5ES-B2	
C1419	1-163-003-11	CERAMIC CHIP	330PF 10% 50V	D1423	8-719-110-03	DIODE RD7.5ES-B2	
C1425	1-124-902-00	ELECT	0.47MF 20% 50V	D1424	8-719-110-03	DIODE RD7.5ES-B2	
C1426	1-124-902-00	ELECT	0.47MF 20% 50V	D1425	8-719-110-03	DIODE RD7.5ES-B2	
C1427	1-163-029-11	CERAMIC CHIP	0.0047MF 50V	D1426	8-719-110-03	DIODE RD7.5ES-B2	
C1428	1-163-029-11	CERAMIC CHIP	0.0047MF 50V	D1501	8-719-300-33	DIODE RU-3AM	

J1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D1502	8-719-911-19	DIODE 1SS119		R233	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
D1503	8-719-911-19	DIODE 1SS119		R234	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
D1504	8-719-911-19	DIODE 1SS119		R235	1-216-295-00	METAL GLAZE 0 5%	1/10W
D1505	8-719-911-19	DIODE 1SS119		R236	1-216-295-00	METAL GLAZE 0 5%	1/10W
D1506	8-719-982-33	DIODE MTZJ-36D		R240	1-216-033-00	METAL GLAZE 220 5%	1/10W
D1507	8-719-911-19	DIODE 1SS119		R241	1-216-091-00	METAL GLAZE 56K 5%	1/10W
D1510	8-719-911-19	DIODE 1SS119		R242	1-216-091-00	METAL GLAZE 56K 5%	1/10W
				R243	1-216-075-00	METAL GLAZE 12K 5%	1/10W
<IC>				R244	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
IC201	8-759-013-17	IC TDA6200		R245	1-216-075-00	METAL GLAZE 12K 5%	1/10W
IC1401	8-752-053-17	IC CXA1114P		R246	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
IC1402	8-759-946-32	IC TEA2014A		R247	1-216-075-00	METAL GLAZE 12K 5%	1/10W
IC1403	8-759-140-53	IC UPD4053BC		R248	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
IC1501	8-759-942-16	IC TEA2031A		R249	1-216-075-00	METAL GLAZE 12K 5%	1/10W
				R250	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
<JACK>				R1400	1-216-295-00	METAL GLAZE 0 5%	1/10W
J1402	1-561-534-41	SOCKET 21P		R1401	1-216-023-00	METAL GLAZE 82 5%	1/10W
J1403	1-561-534-41	SOCKET 21P		R1402	1-216-170-00	METAL GLAZE 68 5%	1/8W
<TRANSISTOR>				R1403	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q201	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1404	1-216-178-00	METAL GLAZE 150 5%	1/8W
Q202	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1405	1-249-434-11	CARBON 27K 5%	1/4W
Q1401	8-729-216-22	TRANSISTOR 2SA1162-G		R1407	1-216-113-00	METAL GLAZE 470K 5%	1/10W
Q1402	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1408	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q1403	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R1409	1-216-041-00	METAL GLAZE 470 5%	1/10W
Q1404	8-729-216-22	TRANSISTOR 2SA1162-G		R1410	1-216-089-00	METAL GLAZE 47K 5%	1/10W
				R1411	1-216-041-00	METAL GLAZE 470 5%	1/10W
<RESISTOR>				R1412	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R201	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R1413	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R202	1-216-206-00	METAL GLAZE 2.2K 5%	1/8W	R1414	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R203	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1415	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R204	1-216-085-00	METAL GLAZE 33K 5%	1/10W	R1416	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R205	1-216-085-00	METAL GLAZE 33K 5%	1/10W	R1417	1-216-023-00	METAL GLAZE 82 5%	1/10W
R206	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R1418	1-247-738-11	CARBON 82 5%	1/2W F
R207	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R1419	1-216-295-00	METAL GLAZE 0 5%	1/10W
R208	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1420	1-216-295-00	METAL GLAZE 0 5%	1/10W
R209	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1421	1-216-295-00	METAL GLAZE 0 5%	1/10W
R210	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1422	1-216-025-00	METAL GLAZE 100 5%	1/10W
R211	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R1423	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R212	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1424	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R213	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1425	1-216-045-00	METAL GLAZE 680 5%	1/10W
R214	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1426	1-216-025-00	METAL GLAZE 100 5%	1/10W
R215	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1427	1-216-001-00	METAL GLAZE 10 5%	1/10W
R216	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1428	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R217	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1429	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R218	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1430	1-216-170-00	METAL GLAZE 68 5%	1/8W
R219	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1431	1-216-041-00	METAL GLAZE 470 5%	1/10W
R220	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R1432	1-216-041-00	METAL GLAZE 470 5%	1/10W
R221	1-216-041-00	METAL GLAZE 470 5%	1/10W	R1433	1-216-033-00	METAL GLAZE 220 5%	1/10W
R222	1-216-041-00	METAL GLAZE 470 5%	1/10W	R1434	1-249-393-11	CARBON 10 5%	1/4W F
R223	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1437	1-249-434-11	CARBON 27K 5%	1/4W
R224	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1440	1-216-045-00	METAL GLAZE 680 5%	1/10W
R225	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1441	1-216-045-00	METAL GLAZE 680 5%	1/10W
R226	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1442	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R227	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1443	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R228	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1444	1-216-033-00	METAL GLAZE 220 5%	1/10W
R229	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1445	1-216-095-00	METAL GLAZE 82K 5%	1/10W
R230	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R1446	1-216-033-00	METAL GLAZE 220 5%	1/10W
R231	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1447	1-216-033-00	METAL GLAZE 220 5%	1/10W
R232	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1448	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1449	1-216-023-00	METAL GLAZE 82 5%	1/10W
				R1452	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R1453	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R1454	1-216-180-00	METAL GLAZE 180 5%	1/8W

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R1455	1-216-180-00	METAL GLAZE	180 5% 1/8W	*A-1654-005-A IFG BOARD, COMPLETE *****			
R1457	1-216-025-00	METAL GLAZE	100 5% 1/10W	<CAPACITOR>			
R1459	1-216-025-00	METAL GLAZE	100 5% 1/10W	C1	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1460	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C2	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1461	1-216-190-00	METAL GLAZE	470 5% 1/8W	C3	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1462	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	C4	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1463	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C5	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1464	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	C6	1-163-031-11	CERAMIC CHIP 0.01MF	50V
R1465	1-216-023-00	METAL GLAZE	82 5% 1/10W	C7	1-124-903-11	ELECT 1MF	20% 50V
R1466	1-216-033-00	METAL GLAZE	220 5% 1/10W	C8	1-124-907-11	ELECT 10MF	20% 50V
R1467	1-216-025-00	METAL GLAZE	100 5% 1/10W	C9	1-130-471-00	MYLAR 0.001MF	5% 50V
R1468	1-216-025-00	METAL GLAZE	100 5% 1/10W	C10	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
R1469	1-216-025-00	METAL GLAZE	100 5% 1/10W	C11	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
R1470	1-216-025-00	METAL GLAZE	100 5% 1/10W	C12	1-136-298-00	FILM 0.0033MF	2% 100V
R1471	1-216-023-00	METAL GLAZE	82 5% 1/10W	C13	1-124-477-11	ELECT 47MF	20% 16V
R1472	1-216-023-00	METAL GLAZE	82 5% 1/10W	C14	1-124-477-11	ELECT 47MF	20% 16V
R1473	1-216-023-00	METAL GLAZE	82 5% 1/10W	C15	1-124-477-11	ELECT 47MF	20% 16V
R1474	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C16	1-124-477-11	ELECT 47MF	20% 16V
R1476	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C17	1-124-907-11	ELECT 10MF	20% 50V
R1477	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C18	1-137-047-11	FILM 0.01MF	10% 400V
R1478	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C19	1-137-047-11	FILM 0.01MF	10% 400V
R1480	1-216-190-00	METAL GLAZE	470 5% 1/8W	C20	1-126-233-11	ELECT 22MF	20% 50V
R1482	1-216-178-00	METAL GLAZE	150 5% 1/8W	C21	1-126-233-11	ELECT 22MF	20% 50V
R1483	1-216-178-00	METAL GLAZE	150 5% 1/8W	C22	1-137-098-11	FILM 0.1MF	10% 100V
R1484	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C23	1-137-031-11	FILM 0.22MF	10% 100V
R1485	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C24	1-124-034-51	ELECT 33MF	20% 15V
R1486	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C25	1-137-102-11	FILM 0.022MF	10% 250V
R1487	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C26	1-137-094-11	FILM 0.047MF	10% 100V
R1488	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C27	1-124-903-11	ELECT 1MF	20% 50V
R1489	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	C28	1-163-109-00	CERAMIC CHIP 47PF	5% 50V
R1501	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C29	1-124-903-11	ELECT 1MF	20% 50V
R1502	1-216-083-00	METAL GLAZE	27K 5% 1/10W	C30	1-124-903-11	ELECT 1MF	20% 50V
R1503	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C31	1-137-047-11	FILM 0.01MF	10% 400V
R1504	1-216-085-00	METAL GLAZE	33K 5% 1/10W	C32	1-130-479-00	MYLAR 0.0047MF	5% 50V
R1505	1-216-081-00	METAL GLAZE	22K 5% 1/10W	C33	1-163-081-00	CERAMIC CHIP 0.22MF	10% 25V
R1506	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C34	1-137-031-11	FILM 0.22MF	10% 100V
R1509	1-216-105-00	METAL GLAZE	220K 5% 1/10W	C35	1-124-907-11	ELECT 10MF	20% 50V
R1510	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C36	1-163-119-00	CERAMIC CHIP 120PF	5% 50V
R1511	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C37	1-124-477-11	ELECT 47MF	20% 15V
R1512	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C38	1-124-477-11	ELECT 47MF	20% 15V
R1513	1-216-091-00	METAL GLAZE	56K 5% 1/10W	C39	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
R1514	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1515	1-216-117-00	METAL GLAZE	680K 5% 1/10W				
R1516	1-216-079-00	METAL GLAZE	18K 5% 1/10W				
R1517	1-216-033-00	METAL GLAZE	220 5% 1/10W				
R1519	1-216-101-00	METAL GLAZE	150K 5% 1/10W				
R1520	1-216-113-00	METAL GLAZE	470K 5% 1/10W				
R1521	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W				
R1556	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W				
<VARIABLE RESISTOR>							
RV1501	1-238-023-11	RES, ADJ, CARBON 470K					
RV1502	1-238-016-11	RES, ADJ, CARBON 10K					
RV1503	1-238-017-11	RES, ADJ, CARBON 22K					
RV1504	1-238-012-11	RES, ADJ, CARBON 1K					
RV1505	1-238-023-11	RES, ADJ, CARBON 470K					
RV1506	1-238-017-11	RES, ADJ, CARBON 22K					
RV1507	1-238-009-11	RES, ADJ, CARBON 220					
RV1508	1-238-016-11	RES, ADJ, CARBON 10K					
RV1509	1-238-023-11	RES, ADJ, CARBON 470K					

IFG

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
<FILTER>			
CDA1	1-404-751-11	DISCRIMINATOR, CERAMIC	
CDA2	1-404-750-11	DISCRIMINATOR, CERAMIC	
SFT1	1-527-840-00	FILTER, CERAMIC	
SFT2	1-527-839-00	FILTER, CERAMIC	
<DIODE>			
D3	8-719-400-18	DIODE MA152WK	
<IC>			
IC1	8-759-003-90	IC TBA129	
IC2	8-759-003-90	IC TBA129	
IC3	8-759-030-48	IC TDA6600-2	
IC4	8-759-513-48	IC TDA2595/V9	
<CONNECTOR>			
IFG13	*1-565-488-11	CONNECTOR, BOARD TO BOARD 12P	
<COIL>			
L1	1-408-410-00	INDUCTOR 12UH	
L2	1-408-410-00	INDUCTOR 12UH	
L3	1-410-064-11	INDUCTOR 2.7MMH	
L4	1-408-421-00	INDUCTOR 100UH	
L5	1-408-421-00	INDUCTOR 100UH	
<TRANSISTOR>			
Q2	8-729-901-00	TRANSISTOR DTC124EK	
Q3	8-729-216-22	TRANSISTOR 2SA1162-G	
Q4	8-729-901-00	TRANSISTOR DTC124EK	
<RESISTOR>			
JR8	1-216-296-00	METAL GLAZE 0 5% 1/8W	
JR10	1-216-296-00	METAL GLAZE 0 5% 1/8W	
R1	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R3	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R5	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R6	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R7	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R9	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R11	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
R12	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R13	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R15	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R16	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R17	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R18	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R19	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R20	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R22	1-216-099-00	METAL GLAZE 120K 5% 1/10W	
R24	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R25	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
<VARIABLE RESISTOR>			
RV1	1-238-016-11	RES, ADJ, CARBON 10K	

REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	RV2	1-238-019-11	RES, ADJ, CARBON 47K	

MISCELLANEOUS				

	Δ	1-426-383-11	COIL, DEMAGNETIZATION	
	Δ	1-451-295-11	DEFLECTION YOKE (Y21PFA2)	
		1-452-032-00	MAGNET, DISK; 10MM φ	
		1-452-094-00	MAGNET, ROTATABLE DISK; 15MM φ	
		1-452-277-00	MAGNET, BMC	
		1-544-728-11	SPEAKER (7.5X13CM)	
	Δ	1-590-501-11	CORD, POWER (WITH NOISE FILTER)	
	V901 Δ	8-738-758-05	PICTURE TUBE (A51JXH61X)	

ACCESSORIES AND PACKING MATERIALS				

	PART NO.		DESCRIPTION	REMARK
		4-200-870-11	MANUAL, INSTRUCTION (GERMAN/ENGLISH/ FRENCH/DUTCH/ITALIAN/PORTUGUESE)	
		*4-200-923-01	CUSHION (UPPER) (ASSY)	
		*4-200-924-01	CUSHION (LOWER) (ASSY)	
		*4-200-925-01	INDIVIDUAL CARTON	
		*4-384-027-01	BAG, PROTECTION	
REMOTE COMMANDER				
		1-465-796-11	CONTROL UNIT, REMOTE (RM-816)	
		4-031-670-01	COVER, POCKET (FOR RM-816)	

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